

THE
WONDERS
OF
NATURE

Throughout the WORLD Display'd,
Both for Diversion and Instruction.

Collected from Geographers, Historians, and
other learned Writers ; with some proper
Reflections.

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L O N D O N,
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M D C C X L.





P R E F A C E.

WHEN I read Books for Diversion at Leisure Hours, I set down remarkable Passages, and finding a pretty large Collection, I thought they might be useful to others, as they have been to myself, by publishing them in a small Volume. They will both divert and instruct the Reader. I have added some Reflections, to render them more useful. It will be a great Advantage to consider the *Works of God. I will remember*, says the Psalmist, *the Works of the Lord; surely I will remember thy Wonders of old. I will meditate also of all thy Works, and talk of thy Doings*, Psal. 77. 11, 12.

By this means we may observe how we ought to behave ourselves with all Humility towards the Creator. When I consider the Heavens, the Work of thy Fingers, the Moon and the Stars, which thou hast ordained, *What is*

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Man that thou art mindful of him?
 Psal. 8. 3. *The Earth is full of thy*
Riches; so is the great and wide Sea,
wherein are things creeping innumerable,
both small and great Beasts, Psal. 104.
They that go down to the Sea in Ships,
and do Business in great Waters, these
see the Works of the Lord, and his
Wonders in the Deep, Psal. 107. 23, 24.

I would not embellish this Work
 with *Fiction*, because I intend to serve
 the *Truth*. I have not invented any
 thing, but speak from good Authorities;
 and if I be misled by these, the Fault
 is excusable on both Hands; for they
 believed their Informations. The Rea-
 der may give me Credit, because I in-
 tend, by these Endeavours, to recom-
 mend the Wisdom of Religion, which
 is the best Happiness that is proposed
 to us in this Life. *Happy is the Man*
that findeth Wisdom, and the Man that
getteth Understanding; her Ways are
Ways of Pleasantness, and all her Paths
are Peace, Prov. 3. 13, 17.

I do not pretend to give an Account
 of all the Rarities of the World; that
 is

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is too great a Task for any Man, and will find Work for Mankind to the End of the World. There is a Wonder in every Pile of Grass, and in every Leaf of a Tree, which would admit of a Philosophical Disquisition, and at last remain above Man's Comprehension. But I have observed the principal Works of Nature, in which there is uncommon Curiosity, and such as will best inform us, that *Nature* is not a distinct *Agent*, but the Work of an *intelligent Mind*, and supported by Almighty Power; which therefore is the Object of Admiration, and the Subject of Praise. *All thy Works praise thee, O Lord, and thy Saints give Thanks unto thee,* Psal. 145. 10.

Many Volumes have been written, which describe the Works of *Nature*, and are worthy to be read; but the particular Design of this Essay is, to be *Multum in Parvo*, to contain much in a little Compass, for the Benefit of those who have no Inclination to purchase, or not time to read larger Volumes, to keep the principal Matters in Remembrance;

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brance ; and it may be no Impediment to the Reading of other Works, which are mixed with other curious Relations. I mean to assist those Enquiries, which every one may make in some measure, and should consider in the Wonders of Nature, *The Works of the Lord are great, sought out of all them that have Pleasure therein*, Pſal. III. 2.

This Work may be an Introduction to a larger Volume, and perhaps may induce some Persons to undertake it. A Society may be employed in it, and the Subject would never be exhausted ; there would still be Room for more Enquiries, and still more Discoveries made. However, as this Essay is very full, I doubt not it will be acceptable, as I imagine it will be useful. To assist this present Performance, and promote a further Undertaking, I recommend the reading of an ingenious Writer upon this particular Subject, that is, the Author of the *Spectator*, out of which I have quoted a few Lines. The whole deserves a single Treatise, which should be read over and over again, Vol. 2. p. 136 to 143.

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“ I could wish our *Royal Society* would
“ compile a Body of *Natural History*,
“ the best that could be gather’d together
“ from Books and Observations. If the
“ several Writers among them took each
“ his particular Species, and gave us a
“ distinct Account of its Original, Birth
“ and Education, its Policies, Hostili-
“ ties and Alliances, with the Frame and
“ Texture of its Parts, and particularly
“ those that distinguish it from all other
“ Animals, with their peculiar Apti-
“ tudes for that State of Being in which
“ Providence hath placed them; it wou’d
“ be one of the best Services their Stu-
“ dies could do to Mankind, and not a
“ little redound to the *Glory of the All-*
“ *wise Contriver.*

“ It is true, such a *Natural History*,
“ after all the Disquisitions of the Learn-
“ ed, would be infinitely short and de-
“ fective. Seas and Deserts hide Mil-
“ lions of Animals from our Observa-
“ tion. Innumerable Artifices and Stra-
“ tagems are acted in the howling Wil-
“ derness and in the great Deep, that
“ can never come to our Knowledge.

“ How-

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“ However, from the Consideration of
“ such Animals as lie within the Com-
“ pass of our Knowledge, we might
“ easily form a Conclusion of the rest,
“ that the same Variety of Wisdom and
“ Goodness runs thro’ the whole Crea-
“ tion, and puts every Creature in a
“ Condition to provide for its Safety
“ and Subsistence in its proper Station.

In the Account of *North Britain*, I have exceeded the Proportion, which I proposed in this Work, but I hope the thing itself will be an Apology for me. The new Roads have carried me a little out of my way to give a Prospect of that famous Work, which is so beneficial to the Country; and I had a certain Account from a Friend, who was present all the time, and had a Share in the Employment. I was the rather induced to insert the whole Account, because it is not made publick in any other printed Book. In this and some other Parts, I have joined *Art* with *Nature*, where *Nature* is left in such a Posture, as may be improved by *Art*.

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THE
WONDERS *of* NATURE
IN ALL
PARTS *of the* WORLD.

DESIGN to give some Account of the Works of *Nature*, which will much divert the Reader, and lead him by his Pleasure to *Profit*. I propose to move Men by a Prospect of this, to look further into another World, and to judge by the Beauty of this World, how much the other is more excellent, where the Creator appears in his full Glory. *For the invisible things of Him from the Creation of the World are clearly seen, being understood by the things that are made, even his eternal Power and God-head.* Rom. i. 20.

I shall chiefly observe the Works of Nature, but sometime the Products of Art. For Providence has design'd Employment for Men, and assists their studious Enquiries. There are many Works of Art, which consist of so many
B curious

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curious Parts, that we cannot apprehend how they were invented, and therefore discover a superior Being, which hath suggested useful Inventions, or given to some Men extraordinary Capacities. *The Lord spake unto Moses, saying, See, I have called Bezaleel, and I have filled him with the Spirit of God, in Wisdom, and Understanding, and Knowledge, and in all manner of Workmanship.* Exod. 31. 2, 3, &c.

The Earth is the greatest Wonder in Nature, that is nearest to our Observation, when we consider it as one Body. There are many larger Bodies, *viz.* The Stars of the Firmament, and every one of them no less wonderful. The Earth is but a *Point* in Comparison of the *Universe*; yet it is a mighty Wonder, to manifest a Divine Being, and a preserving Providence, tho' He is not visible to us. It is a vast Collection of Matter, surrounded with light Air, having nothing to support it, till we come to an *Almighty Being, who upholdeth all things by the Word of his Power.* Heb. 1. 3.

This Globe of Earth is a *Miracle* of the Divine Power, as it hangeth in the *Air*. For all Bodies belonging to it have a Gravitation, and a Tendency to the Center of the Earth, according to their natural Solidity. They fall downward more or less speedily, as they are less or more compact; and they would rest in the *Center*, because from thence there is an *Ascent* every way. Every Part hath the same Tendency, but the Whole hath not a like Gravitation

vation, no proportionable Effect, nor Power according to its *Weight*. Therefore, there is an Almighty Power, *who hath laid the Foundation of the Earth, that it should not be removed for ever.* Psal. 104. 5.

If the Earth abideth in one Place, there must be a *Cause* to make it immovable, otherwise it would naturally fall downward somewhere: or if it moveth round the Sun, as it seems more agreeable to Reason, there is no less need of a mighty Hand, to keep it immovable in its Course. There is an ingenious Account, how Effects are produced by second *Causes*, and how the Earth is sent forth into a direct Line, and drawn into an Elliptical Motion, that is, moving in an oval Figure, by a circular Motion and Attraction of the Sun; but both would be a dead Weight, without a constant Support of the Almighty, and either way agrees to this Scripture, *He stretcheth out the North over the empty Place, and hangeth the Earth upon nothing.* Job 26. 7.

Ptolemy is accounted in some sort the Founder of *Astronomy*. He formed a System according to Appearance, that is, the Sun and Firmament moving about the Earth, and the Earth standing still. According to his Computation, the *Sun* runs in one Hour eight millions and a half of *English Miles*; *Lansbergius* says above ten millions. But *Ricciolus* goes beyond the rest, and is remarkable in this Respect, that the famous Mr. *Boyle* calls him the learned and diligent *Ricciolus*, as having

greater Abilities, and having made greater Improvements, than any that went before him. According to him the Sun moves in one Hour 52516200, that is, fifty-two millions of *English* Miles and more; in one Minute above eight hundred thousand, and in one Second about fifteen thousand Miles, which is about ten thousand times swifter, than a Bullet or Ball from the Mouth of a *Cannon*.

How incredible soever this *Motion* of the Sun is, yet that of the three supposed Planets is still swifter, *viz.* *Jupiter*, *Mars* and *Saturn*. And lastly, the Motion of the fixed Stars, especially, those near the Equinoctial, is beyond Comparison swiftest of all. To all which it will be said, that such Motions are incredible. For who can imagine, that Matter should move like a *Thought*, or that a Body should be as swift as a Spirit? I answer, this is very true, and this makes way for the new System of *Copernicus*. For how incredible soever these Motions are, we must either allow them, or allow the Motion of the Earth, upon its own Center, as well as round the Sun; there is no avoiding the one or the other. *Kepler* and *Galileo*, the famous Bishop *Ward*, Sir *Isaac Newton*, and other learned Men, having well consider'd the Inconvenience of the *Ptolemaick System*, have agreed with the famous *Copernicus*, and there is scarce any learned Mathematician, but what is now of the same *Opinion*.

But

But however these great Works may be explained, and ingeniously ascribed to second *Causes*, they cannot be compleatly understood, but must at last be referred to a *Divine Power*, which keeps them in their natural Courses. We cannot perfectly comprehend, how a Pile of Grass receives its Colour, and how the Colour is conveyed to the Eye, nor how the Scent of Flowers is raised, and how it hath an Impulse upon the Nose. Much less can we comprehend the greater Works. But as those Perceptions result from their *Objects*, under the Creator's Direction: So the most rational Account of the greater Works is, that they are the continued Operation of the All-wise Architect. *Thy Way is in the Sea, and thy Path in the great Waters, and thy Footsteps are not known.* Psal. 77. 19.

Now, when there is a better Account of the Planets, and yet we do not perfectly understand, how they are directed and preserved in their Courses, it is not to be expected, that the Holy Scriptures should teach these Matters. They accommodate their Expressions to the Manner of Men, and to the Opinion of those Times. Although the Scriptures celebrate the *Works* of God, more and better than any other Writings, yet they were not designed to acquaint us with his *Secrets*, and to teach us nice Speculations; that was not their Business. A better State is the *Mark* we should aim at, and that is the principal Import of God's Word. We need not curious Matters for our spiritual

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Occasions, nor ought to search out the Ways of God. *His Judgments are unsearchable, and his Ways past finding out.* Rom. 11. 33.

The Proceedings of Creation and Providence are too high for us, we cannot attain unto them, yet we may know in Part, and ought to make useful Enquiries, so far as our Circumstances will allow, and take Assistance from others, that we may be well informed in the great Concern of Religion. But a Caution is to be used, and a Measure put to curious Enquiries, lest we may be misled by an *Ignis fatuus* of a conceited Opinion, and our Knowledge turn to vain Philosophy, which often robs Men of their Religion. A plain Contemplation of God's Works, and a moderate Knowledge are sufficient, and herein I propose to assist the Studious, that they may observe the Works of God upon the Earth, *and consider his Wonders in the Deep.* Psal. 107. 24.

There is a little *World*, the rational Creature, *Man*, and that is a World of Wonders, an Epitome of the Creation. He is a Composition of two Worlds, both of Heaven and Earth, of *Spirit* and *Matter*. His Body was formed out of the Earth, but his Soul immediately breathed from the Father of Spirits, each in itself very wonderful; but it is a most amazing Wonder, how these two different Natures are united, and by what Ligaments they are tied together, or how they influence each other. *I will praise thee, O Lord, for I am fearfully and wonderfully made; marvellous are thy Works,*

Works, and that my Soul knoweth right well.
Pfal. 139. 14.

We should look into the World, and observe among all created Beings, what there is to be admired. In the Children of Men there is Virtue and Beauty. There is Beauty in all the World, an admirable Contrivance of all its Parts, fitted for mutual Dependance, and Serviceableness one to another; yet it is to be observed, that these are only small *Streams*, proceeding from an infinite *Fountain* of Goodness, and how amiable soever we think any Creature to be, or how wonderful all the World, the Creator is infinitely more, and beyond all Comparison to be admired.

The Understanding or Reason is supream Ruler in the little World of Man, wonderful in a material Substance. It hath an extensive Property, to improve itself, and by things visible to know the invisible things of God. It can survey the whole World, search the Secrets of Nature, measure the Circuit of the Earth, sound the Depth of the Sea, mount as high as Heaven, contemplate the Stars, passeth the everlasting Doors, and seeth him that is invisible. When the Body sits still, the Soul can be in the swiftest Motion, and travel by Meditation, to the Ends of the Earth, to the Height of Heaven, and to the Depth of Hell.

The Will of Man is a strange Faculty; it ought to be subject to the Understanding, and it is its Virtue to be subject, as it is the Virtue of Reason to govern well: However the Will

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is a great Commander. The Understanding directs many things; but the Will is free in the chusing or refusing of them. Reason saith, this is Good or this is Evil; but the Will saith, Let it be done. And when the Will commandeth, all the Members perform their several Operations. Other Creatures are carried by a kind of Necessity to the Actions of their kind; but by the *Will* Man is Lord of his own Actions. The Perfection of the Understanding makes a wise Man, but the Rectitude of the Will makes a good Man. *Chuse ye whom ye will serve.* Jo.h. 24. 15.

The Memory is a wonderful Faculty; many things may be laid up therein, to be produced upon Occasion. In some Persons it is extraordinary, to shew what God can do; but generally it requires much Repetition, to find Employment for Men. It is a wonderful Work of God, that so many Ideas are crowded together, and lie as it were dormant a long time, in the narrow Compass of Man's Brain, and at his Pleasure sally forth, into the vast Plain of Sciences, and return to their Place, to wait for further Orders. There is a kind of Weakness, by which we forget many things, and have need of much Exercise, to refresh the Memory, in every commendable Work.

The principal Use of the Memory is for the Soul's Benefit, to remember our Creator in the Days of Youth, and all the Days we live in this World, so as to perform our Duty to Him, in hope of his everlasting Favour.

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The Memory comforts the Soul, with the Remembrance of its Performance, in bringing Glory to its Creator, and the wise Management of itself. It remembers the Works of the Lord, and calls to mind the Wonders of old Time, for the unspeakable Good of the Soul. It is the Treasury of Knowledge, which the Soul acquireth, by Reading, Hearing and Meditation. It treasures up the Words of eternal Life, *by which ye are saved*, saith the Apostle, *if ye keep in Memory, what I have preached unto you.* 1 Cor. 15. 2.

These noble Faculties are so many Witnesses, that Man is more than Matter; that he hath a spiritual Nature, of which Matter in itself is not capable; and as it is more excellent, so it is more durable, even an immortal *Being*. It was made by Image of God, which could never have been said, if it was not design'd to live. The Passions too are of excellent Use, being under a good Government of *Reason*; but I shall here only observe concerning *Joy*, that being raised to a great Height, it causeth a Lipothymia, a Swooning; whence Nature probably whispers to us, that *Man* is capable of greater Pleasure than the present State of his Body can bear, and that is reserved to another *Life*.

Great Britain is famous for its Government, and is singular in a happy Constitution. It is the only Nation in the World, that hath preserved the due Medium, a proper Prerogative to the King, and a convenient Liberty to the Subject.

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Subject. It is most of all remarkable for singular Providences, whereby it hath been deliver'd from Enemies, and the most valuable Blessings preserved, and secured by the Protestant Succession, in the illustrious *House of Hanover*.

England is more particularly eminent, in the Church by Law establish'd, and the many excellent Divines, who have defended orthodox Religion. The Air is temperate, not commonly subject to Extremes of Heat and Cold, nor so rainy as on the Continent. The Country is generally fertile, hath the most necessary Commodities, and agreeable Conveniencies of Life. The Inhabitants may live well, without being obliged to others, and can often spare Grain for others. The Soil is celebrated both by ancient and modern Writers, who call *England* the Granary of the Western World. *Atlas*.

London may be said to be the most famous City in the World, and tho' it has no natural Rarities, in Brutes or inanimate Creatures, there is Mankind in the greatest Perfection. It is an Epitome of the World, and the best part of it, in respect of things most valuable, chiefly in the best Religion better put in Practice, than in any other great City, according to the Judgment of unbyass'd Reason, and the Information of sincere Reasoning. No other great City can compare with this, for good Order in Civil Government, and for less Disorder in so numerous a People. *Lat. 51. 30.*

Lon. 28. From *St. Michael's Island* in the *Azores*.

London is one of the greatest, most populous and trading Cities in the World, and better situate for Commerce, than any other great City. It excels all other Cities in its great Number of fine Squares, inhabited chiefly by the Nobility and Gentry. The *Royal Exchange* is the finest Building of that kind, and the richest of that Size in the World. The River *Thames* does not compare with some other Rivers, for the Length of its Course; yet it exceeds all in the Excellency of its Waters, and in the vast Riches convey'd upon it from all Parts; it brings Ships of great Burthen to *London*, which is sixty Miles from the Sea, and the Tide runs twenty Miles higher.

William Rufus rebuilt *London-Bridge*, which had been carried away by an unusual Flood, *Anno* 1098. He built *Westminster-Hall* two hundred and seventy Foot long, and seventy broad. This being done when he was in *Normandy*, he found Fault with its being so little, saying it was scarce fit to be a Bed-Chamber, in comparison of what he intended it to be; yet it is reckon'd the largest in Christendom without Pillars. There are Buttresses of *Irish Oak*, adorned with Figures of Angels, and the Roof made of the same sort of Timber; so that it is always clean from Filth occasion'd by Vermin. *Henry VII.* built a Chapel at the East End of *Westminster-Abbey*, *Anno* 1502. which is of such admirable Workmanship, that

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that *Leland* in his Time called it the Wonder of the World. *Atlas, Collier.*

England hath abundance of Medicinal Waters; the Baths in *Somersetshire*, the Spaws in *Yorkshire*; especially that of *Scarborough*, and other remarkable Springs, which derive a Virtue from Sulphur, Salt or Bitumen. Others have a petrifying Nature, which turn Wood into Stone. Some Springs ebb and flow, but generally in an irregular Manner; for which it is hard to assign a Reason. The *Lay-Well* near *Torbay* rises and falls several times in an Hour; the *Bone-Well* in *Herefordshire* is always full of Fish or Frog Bones, tho' frequently emptied and cleared of them. There is a Well near *Wiggan* in *Lancashire*, which being emptied, presently there breaks out a sulphurous Vapour, which makes the Water bubble up as if it boiled, and a Candle being put to it, it burns like Brandy; by its Heat you may boil Meat, &c. and yet the Water it self is cold. *Atlas, Dr. Grew.*

In *Derbyshire* there is the famous *Peak*, and some hideous Cavities, as *Pool's Hole*, *Elden Hole*, &c. There is petrifying Water, and at a small Distance a Brook of both hot and cold Water, so joyned in the same Stream, that you may at once put the Finger and Thumb, the one into cold, the other into hot Water. The Wonders of the *Peak* are so many, I shall not here enumerate them, but refer to the several Authors who have given an Account of them, as *Cambden*, *Cotton*, &c. *Wendon Well* ebbs and

and flows three Quarters of a Yard, and when it ebbs makes a Noise ; it is a Yard broad and deep ; it is reckoned one of the Seven Wonders of the Peak. Several Mountains in this Country have Cavities at the Bottom, call'd by the Inhabitants *Swallows*, because Streams run into them, of which no Vent appears. There is a wonderful Well in the *Peak-Forest*, which ordinarily ebberh and floweth four times in the space of one Hour, keeping his just Tides, whence the Town *Tideswell*. *Cambden.*

Worcester, eighty-six Miles N. W. of *London*. Here is made much Cloth, the finest in *England*. In the Cathedral King *John* lies in a Tomb of white Marble, and Prince *Henry*, Son of *Henry VIII.* in one of Jet. In the County there are several Salt Springs. About six Miles from the City, near *Holt-Castle*, the *Severn* so abounds with *Lampreys*, and these so constant thereabout, that Nature seems here to have formed a Pond for them ; their chief Season is the Spring, and they are then delicious Meat. *Droitwich* is noted especially for Salt Springs, which yield excellent white Salt ; the Brine is strong and boil'd in Houses built on purpose : the Town is enrich'd by this Commodity. In the Country the Hedges are set with Pear-Trees, and the Inhabitants make great Store of Perry. *Atlas.*

Oxford, a most famous *University*, where the first College was founded and endowed about the Year 872, by the learned *Saxon* King *Alfred*, who sent his own Son to study there. In
Oxford-

Oxfordshire are found several sorts of curious Stones and Shells, in which Nature has imitated many living Creatures; some of the true Oyster-Shape, plentifully found in *Cowley-Common*; others like Cockle-shells, prettily streaked, found at *Haddington*. There are Muscle-stones of an odd kind of Figure, and not easy to be parallel'd, tho' the testaceous Kingdom be of very large extent: They are not hollow, but within of a stony substance, of a yellowish Colour, and covered without with a white shining kind of Armature, with Lines agreeable to the Animal and the Figure of the Stone. These were found in digging of a Well in the Parish of *Cleydon*. Dr. *Plott*.

Cleydon. There is a small Spring that rises in the Town Street, which continues running all the Year, but most plentifully in dry Weather, like the *Scatebra* mentioned by *Pliny*; there is another such in the same Town of the same Property. These Springs run lowest in the Winter Season, and advance in Summer remarkably higher, as I am, saith the Author, inform'd by credible Persons, from *Lambourn* in *Yorkshire*, all the Springs in that Town most constantly do. The Fountain-Heads of the River *Rea* lie for the most part in a plain Country, having little more to feed them than a just Declivity to facilitate their Passage. These are Arguments that all running Waters owe not their Continuance to Rains or Dew, but there must needs be a greater Supply, that is, from the Ocean, which sends Waters thro' the

the *Passages* of the Earth, and receives as much as it gives.

It is indeed very wonderful, how the *Ocean* waters the Earth, yet it must be so in divers Quantities, as it finds Passages order'd for it by Providence; because it is never bigger for all the Waters it receives. All Springs do not return, but that is balanced by Land Vapours, which are part of what reaches the Ocean with the Rivers. Some Springs are partly spent in Exhalation, and partly upon the Surface of the Earth; yet these are the most durable, witness that famous one of *Nettlebed*, which I know not, says the Author, from what old Witch heretofore, by way of Derision, they call *Mother Hibblemeer*; whereas, if we consider how serviceable she has been, being never known to fail them in the driest Summer; and that in a Country so incapable of Wells, that there is no such thing to be found in the Parish, she rather merits the Esteem of the Nymph of the Place. Dr. *Plott's Nat. Hist. of Oxfordshire.*

Oxfordshire. There are Places remarkable for the Echo, which is a strange Phænomenon. Some return many Sounds for one, and others repeat many Syllables distinctly. They are formed from Vaults or Arches, or Angles of Buildings, with the Inside towards the Speaker. But the *Cause* is not only in the Manner of Building; it is more to be referred to the Pores of the Stones, which are fitted to receive Vibrations of the *Air*, rather than others,

others, just as two Viols tuned to an Unison, where the Strings being screwed to the same Tension, and their Pores put into the same Figure, if you strike one, the corresponding String of the other Viol presently answers it ; because the first String, being of such a Tension and having Pores of such a Form, makes Vibrations in the Air suitable only to the Pores made by the same Tension in the other String.
Dr. Plott.

This Comparison will help in another *Case*, which is more difficult to be solved ; that is, of a Man having *Pains* instead of his pregnant Wife, which has been observed to be very frequent in some Parts of the *East Indies*. There is thought to be some secret Sympathy, or rather a great Power and Subtily of Effluvia, whereby the Abdomen of the Man is affected, his Constitution and Parts being like those of the Woman ; so that the Woman's Pains, that are usual in breeding, presently pass over to the Man, and are likewise attracted by him, through a natural Correspondence, and an extraordinary Affinity to each other.

Dr. Plott asserts the Certainty of the Thing, tho' he says he will not attempt to determine how it comes to pass, it being difficult not to err concerning such Mysteries of Nature. He ascertains the Matter of Fact, that it has happen'd to some Persons in *Oxford*, Men of unquestionable Veracity. One of them affirms, that he has unusual Pains, which he should never have thought to have relation to his
 Wife,

Wife, if they had not suddenly ceased, as soon as his Wife began to be in *Labour*. The *German* Virtuosi report that one *Faber*, of *Buxovil* in *Alsatia*, constantly acted the Part of his pregnant Wife, and had those inordinate Longings that usually attend Women in that Condition, his Wife all the while suffering no such Inconveniencies. Dr. *Plott*, p. 194.

At *Oxford* there was a Storm *Feb.* 1661, that laved out the Water of the River *Cherwell*, and cast it quite over the Bridge at *Magdalen* College, near twenty Feet high above the Surface of the Water. It was observed by an able Seaman at *Bristol*, that this Storm was the sag End of a Hurricane, which began in *New England* about three Hours before it came hither; the Seaman observ'd that it came directly towards *England*. Such another Storm happen'd at *Nottingham*, a Mile off, all the Houses of two little Parishes, with their Churches, were wholly born down, and the Water from the River *Trent*, that ran between them, was carried with the Mud a Quarter of a Mile, and cast against Trees with such Violence, that they were torn up by the Roots; this happen'd in *Q. Mary's* Reign. Dr. *Plott*.

This Author commends the Air of *Oxford*, which is temper'd by a good Situation. The Air is naturally cold, as it is found to be on high Mountains, which are above the Reach of warm Exhalations, and Reflection of the Sun's Heat from the Earth. On high Ground the Air is more pure, and consequently more
C healthy.

healthy. Whence it is, that People, living on a moderate Ascent, and upon a dry Soil, are usually of a generous Temper, suitable to the sweet and healthful Air about them; whereas the Inhabitants of Fenny Countries, whose Spirits are clogg'd with perpetual Exhalations, are generally of a more heavy Temper, and less pleasant Conversation. *Dr. Plott.*

The Water of the River *Thames* is very remarkable, being temper'd with some kind of Acid, which it licks from its Banks. It hath, like other Waters, a strong smell, after keeping some time, but it is not an absolute Corruption: For, tho' the Mariners are forced to hold their Noses when they drink it, yet it does not make them sick; and after a third or fourth Fermentation, it becomes very sweet; whereas other Water is irrecoverable, and dangerous after its stinking. This Water in eight Months Time acquires so spirituous and active a Quality, that upon opening a Cask, and holding a Candle near the Bung, its Steams have taken Fire like the Spirit of Wine, and sometimes endangered the Ship. *Philos. Transf.*

The River *Isis* abounds with Fish. Plenty of Fish is an Indication of good Air and wholesome Water. In the Year 1674, this River gave an ample Testimony of its great Plenty, when the Mayor appointed two Days for Fishing, betwixt *Swithin's Wier* and *Wolvercot-Bridge*, which is about three Miles; they took fifteen hundred Jacks, besides other Fish. *Tibiscus*, now called *Tyssa*, a River in *Hungary*,

Hungary, is so replenished with Fish, that in Summer, when the River is low, the People say, *The River smells of Fish*. The River *Bodrock* is said to consist of two Parts Water, and one Fish. On this River is *Tockay*, famous for its Wine, much esteemed all over *Europe*, and sold at a great Price. Dr. Plott, *Atlas*.

The Fecundity of Rivers is ascribed to the various *Salts* which are to be found in the Bottom of a River, or washed from its Banks. The Freezing of Water also proceeds in a great measure from the Conflux of *Salts*, before they be dispersed at large. It is observed from this Reason, and the Testimony of Watermen, that Congelations begin at the Bottom, because they frequently meet with Cakes of Ice arising from the Bottom, and bringing Gravel with them. It is also proved from the vulgar Experiment of freezing a Pot to a Stool by the Fire, a little Salt being mixed with Snow and stirred in the Pot, Water cast on the Outside presently freezes and fastens the Pot to the Stool. Dr. Plott, p. 27.

Standing Pools, or Water in a Vessel, freeze at the Top sooner, because their Salts sooner fly up, and are catch'd by the outward Cold. Not only Induration, but also an Addition of Weight, proceeds from Salts, as it appears from the great Quantities of them that are found in Stones, Bones, Shells and other weighty Bodies. Petrification, or turning Wood, &c. into Stone, proceeds from Salts, which being rarified into an invisible Steam, (as the Par-

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ticles of Silver and Gold) when dissolved in a proper Menstruum, and meeting with the cold Air, cloath Things with a Crust of Stone. Thus Salts give Life to the Waters, multiply the Fish, and are the Cause of Congelation and Petrification. 28, 32.

All Petrifications proceed from Salts, especially from Vitriol and Arsenic, by their subtle Steams. Earths, as well as Waters, afford such Steams as permeate the most solid Texture. There is a curious Instance in a Stone found in the Fields near *Clifton*, which represents a sound Piece of Ash, cut both parallel and transversly to the Pores, retaining the Grain and Colour so exactly, that no body at first sight believes it to be other than a solid Piece of Wood, and yet this was taken out of the Ground far from Water. The Change seems so perfect, its Subject being very sound, that either we must own such Petrifications, or allow that Stones may grow in Grain and Colour exactly like Wood.

In the Parish of *Wendlebury*, there was a Stone dug up in gravelly Ground, in the Form of a Piece of Oak, that seems to carry a Necessity with it of its being once solid Wood: For beside that it shews the close Grain of Oak, and therefore by Naturalists called *Dryites* from *δρῦς* an Oak; it was taken up in great Quantities too, and in some of the Pieces it may be plainly seen where Twigs have come forth, the Knots still remaining where they were cut off; so that unless we fly to the
Sports

Sports of Nature, and allow her to imitate almost all Things in Stone, we cannot well avoid a Consent, that this was some time really Wood Dr. *Plott*, p. 63.

In *Hildesheim*, a small County in *Germany*, at the Castle of *Steurewald* there is a stinking Well, such as are some in *England*, that smell like rotten Eggs; such a Spring is near *Durham*, which colours Silver like Copper; and this proceeds from some kind of Minerals, especially Vitriol. But *Agricola* observes that the Water of *Steurewald* comes forth of a Marble Quarry, and that such as drink it fasting, belch a Smell like rotten Eggs, and also an Odour of brayed Marble. Vitriol is a smart *Acid*, and nauseous of it self, yet is corrected by a well concocted Sulphur; so that some Springs, altho' impregnated with *Acids*, yet taste like Milk.

Water is known to be mixed with *Acids*, when it refuseth to lather with Soap, as it is found in many Springs, tho' not in Rivers, because the Salt is there dispersed, but in Springs comes strong from the Mineral; yet if this Water stands two or three Days in a Vessel, it will then lather. * Several Springs have a sweet milky Taste, which yet are mixed with *Acids*, their Edge being rebated by Sulphur, as it is found by Experience that the Austerity of Vitriol in the Mouth, is corrected by the Fumes of Tobacco taken quickly after it, whose sulphureous Particles, says the learned Dr. *Willis*, mixing with the Salt of the

* Because the Salts fall down to the Bottom.

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Vitriol, create such a pleasant and mellifluous Taste. Dr. Plott, p. 47.

At *Shotover* there is found much *Ocre*, and accounted the best in the World. It is a kind of Earth, of a yellow Colour and very weighty, much used by Painters simply by it self, and often mixed with the rest of their Colours: They dig on the East Side of a Hill, and the Vein dips from East to West. There are two sorts, the *Stone Ocre* and *Clay Ocre*; the former the better sort, which is ready for Use as soon as dug; the other requires to be wash'd, and beat into thin broad Cakes. The Ancients call'd it *Sil*, as in *Pliny*. In all likelihood it has received the modern Name from the River *Ocre*, upon the Arrival of the *Angles* and *Saxons* in *Britain*. Its Banks yield great Quantities of *Ocre*, and it waters the City of *Brunswick*.

At *Cornwell* there is plenty of *Lac Lunæ*, which is a kind of fine Earth, very white and porous. It is here in so great Purity, that the driven Snow is not whiter; it is found in the Seams of Rocks, and is a Sign of very good Lime. It gives Notice of Mines, and is useful in Medicines. It cures Blemishes of the Face, like the Earth *Quei* of *China*, mentioned by *Kircher*. Being given to Nurseries, it increaseth Milk, and quickly makes their Breasts apparently swell. It is thought to have the Virtues of *Samian* Earth, good for Womens Diseases, and stopping of Blood. It is also a good Narcotick, that causes Sleep with Safety, derived

rived ἀπὸ τῆς νάρκης à stupore; whence also is *Narcissus*, the white *Daffodil*, which causes Drowfiness by its Smell. Dr. Plott, p. 60.

Cambridge is distinguished by a most famous *University*, as is its Rival *Oxford*. The former was a *Roman* Colony, and had then its Schools, wherein the *Roman* and *British* Youth were instructed, in which Respect it is more ancient than *Oxford*, though this had first large *Colleges*. The Country yields excellent *Saffron*, the dearest Commodity that *England* produces. The North Grounds are fenny, being a Part of the great Level, call'd *Bedford Level*, which extends into several Counties, and contains about 300000 Acres, as surveyed by Sir *Jonas Moor*. It appears to have been formerly dry Land, by the Ruins of Houses, &c. and by *Malsbury's* History; and the Alteration seems to have proceeded from *Earthquakes*, which stopped the Course of the Rivers.

Huntingtonshire hath a Share of the Fens, and there are several Meers, which have Plenty of Fish, but the Waters are often violently disturbed in the calmest Weather, to the great Danger and Terror of the Fishermen, supposed to be occasioned by Eruptions of Wind underneath. *Wittlesey-Meer*, six Miles long and three broad, is clear Water and full of Fish; yet, like the rest, is subject to Water-quakes in calm Weather. The Air about it is foggy and stinking, fatal to Strangers, but the Natives bear it well and live long. At a Village called *Hele-Weston*, there are two Fountains not far afunder,

afunder, the one sweet, helping the Dimness of Eyes; and the other brackish, good against Scabs and Leprosy. *Collier, Atlas.*

Rutland is so called from the Redness of its Soil, and it is the least County in *England*; yet what it wants in Extent is made up by the Goodness of the Ground, giving Place to none for Corn and Tillage. The Wool of the Sheep is reddish, supposed to proceed from the *Redness* of the Soil. *Chichester* is water'd by the River *Lavant*, whose Course is very unaccountable, being sometimes quite dry, and at other times runs with a violent Stream, even in the Middle of Summer. *Buckinghamshire* is fruitful in Grass, which feeds Abundance of Sheep, much valued for their fine Wool; it is common here to give ten Pounds for a Ram to breed. There is one Field, call'd *Berry-Field*, which has been let for eight hundred Pounds a Year; it is not said how large it is. *Atlas.*

Wiltshire is a fruitful Country, and *Salisbury* Plains are reckoned the finest in *Europe*. There is *Stone Henge*, which is accounted one of the *Wonders* of the Kingdom. It is Matter of Surprize, how such large Stones should come thither, since there are no Quarries nigh, and they want Stones for building. It consists of four *Circles* of Stones, the outermost Circle one hundred Foot Diameter; the Stones are four Yards high, two broad and one thick; within are Stones set upright, twenty Foot high, six broad and three thick. Dr. *Gibson*

Gibson in *Cambden* thinks it to have been done by the *Britons*, after the *Romans* came in, as a rude Imitation of their Works. In this County is *New-Forest*, made by *William* the Conqueror, who for that End destroyed many Towns and thirty-fix Churches. Historians observe that two of his Sons and a Grandson were kill'd upon this Plot by Accidents, and look upon them as Judgments for demolishing so many Churches; there is still the Oak Tree on which Sir *Walter Tyrrel's* Arrow glanced, which killed *William Rufus*. *Atlas, Cambden.*

Northampton, fifty-four Miles from *London*, N. W. The Shire borders upon more Counties than any other in *England*. On the North it hath *Lincolnshire*; on the South *Bedfordshire*, &c. *Oundle* on the River *Nene* is noted for its drumming *Well*, generally thought to foretel War, or the Death of some eminent Person, as appears by a late printed Account of this *Prodigy*. This Well supplies four Families with Water, which is good at all times, whether drumming or not. It has been once emptied to find out the Cause of the Noise; but the Man that went down to the Bottom, could perceive nothing, but only heard a Noise above him. It is not unlike the beating of a March, uncertain in its Continuance, sometimes lasting but a short time, at other times a Week or longer; nor is it always heard at the same Distance. *Collier, Atlas.*

Cornwall

Cornwall is most famous for Tin-Mines. Here is also a Mineral call'd *Mundick*, which of late begins to rival the Tin in Value, and yields good Profit. But it is somewhat dangerous to the Workmen, because of unwholesome Steams; the Water, in which it is wash'd before it is burnt, is an immediate Cure for Wounds, but when burnt it is poisonous. This County is farthest South of any Part of *England*, yet their Spring is more backward, and their Corn scarce fit for the Barn till *Michaelmas*; because it is a narrow Tract of Land between two Seas, having much of the Sea Air. *Falmouth* is near the Land's End. *Lat.* 50.

Near *Pen-fans*, there is a famous Stone, called *Main-Amber*, which being a great Rock advanced upon some other of meaner Size, with so equal a Counterpoise, a Man may stir it with a Push of his Finger, but a great Number of Men cannot remove it quite out of its place. *Cambden*, p. 188. It was removed by undermining in *Oliver's* Time. *Atlas*. The *Cornish Chough* is a kind of Crow with Bill and Feet red, not, as *Pliny* thought, proper to the *Alpes* only. This Bird the Inhabitants have found to be an Incendiary and thievish too; for it often-times secretly conveys Fire-sticks, setting the Houses on Fire, and as closely filcheth and hides little Pieces of Money. *Cambden*.

In *Cornwall* is found a kind of *Diamonds*, which set with a good Foil, and at first Sight may deceive a good Lapidary. *St. Vincent's*
Rock,

Rock, near the River *Avon*, is so full of *Diamonds*, that a Man may fill whole Bushels of them. In bright and transparent Colour, they match the *Indian Diamonds*, if not excel them; in Hardness only they are inferior, and are less valued, because they are so common; but in that Nature herself hath framed them pointed with six-corner'd and four-corner'd smooth Sides, it is worthy of Admiration. The other *Rock* on the West-side is full of *Diamonds*, which, by a Wonder, Skill and Work of Nature, are enclosed as young ones, within the Bowels of hollow Flints. *Cambden*, p. 239.

Devonshire. At *North-Taunton*, there is a hollow Place, out of which sometimes springs a little Brook, which the People count ominous, because it rarely appears, and Observations have been made upon it. There are *Chalybeat-Fountains*, and one near *Mary-Church*, which ebbs and flows several Times in an Hour; it is as clear as Crystal, very cold in Summer, and never freezes in Winter. There are rich Mines of Tin and Copper. There is a kind of red Marl that fructifies barren Ground, and a blue Marl that makes excellent Pasture. At *King's Bridge* there is a particular Custom of paying Tythes to the Parson in white Ale. *Terbay*, twelve Miles N. E. of *Dartmouth*, is memorable for the landing of the late King *William* of glorious Memory *Novemb. 5. 1688*.

Dorsetshire. *Hermitage*, a small Village near *Halbridge* is remarkable for a strange Accident that happen'd here in 1585, when a large Piece
of

of Ground was, by an Earthquake or subterranean Wind, carried forty Rods from it's Place, leaving a great Pit behind it, with the Hedges and Trees along with it which remained entire. *Dorchester* Town, one hundred Miles W. from *London*, is famous for Malt-Liquor, and for a *Roman* Camp called *Maiden Castle*, and an Amphitheatre called the *Mambrey*. Near *Winford Eagle*, a few Years ago, in digging up old Burrows, or Trenches, they found a Place like an Oven, curiously carved round about; at the first opening the Diggers could not endure the Heat, but opening it further, they found an *Urn* full of Bones, and several more Urns not in Ovens. *Atlas*.

Surrey, Beddington: There is a noble Seat belonging to the Family of *Carew*, with fine Gardens, where are Orange-trees, the first that were brought into *England*, above one hundred Years ago. *Epsom* is famous for mineral Waters, which have an aluminous Taste; they heal Sores outwardly, and are drank for several Diseases; there is a Salt extracted from them much used by Apothecaries. In this County is a Place called the *Swallow*, under *White Hill*, where the River *Mole*, called the *English Anas*, runs under Ground for above two Miles, so that the Inhabitants may boast as the *Spaniards* do of their *Guadiana*, that they have a Bridge which feeds several Flocks of Sheep. The River *Guadiana* was anciently called *Anas*. *Atlas*.

Kent,

Kent, Folkstone. Upon the Cliffs are found Stones of strange Shapes and Figures, resembling Screws, Muscles, Cock-spurs, transparent Quills, Almonds, Snakes. The like are found at *Alderley* in *Glocestershire*, some in the Form of Oysters, Cockles and Periwinkles, which may be looked upon, saith the Author, as *Lusus Naturæ*. But here is also a Work of Nature in Pear-trees and Apple-trees, which grow *naturally*, and of which they make great Quantities of Perry and Cyder; yet more might be made, were it not for a kind of Birds that come in great Companies, a little bigger than a Sparrow, which have a Bill thwarted cross-wise at the End, whereby they cut an Apple in two at one Stroke, but eat only the Kernels, and so spoil more than they devour. *Cambden.*

Leicester is eighty Miles N. N. W. from *London*. In the County is one thing remarkable, that all who are born in the Village named *Charleton* have an harsh ratling kind of Speech, and cannot well pronounce the Letter R. *Lincoln*: The Cathedral Church is a stately Building, which occasion'd a Proverb, *As the Devil looked over Lincoln*, who is supposed to have looked upon this Church with a fowre Countenance, as maligning Mens costly Devotion; and it is applied to those Persons who look upon anything of Moment with an envious Eye. At *Titchtoft* are found neither Mice nor Rats, though the Neighbourhood is much pestered with them. In the S. W. of this County are found *Astroits*, or Star-like Stones, with five Beams

Beams or Rays, anciently esteemed for a pretended Virtue in procuring Victories. *Collier.*

Nottinghamshire. There is a sort of Stone softer than Alabaster, but when burnt makes a *Plaster* harder than that of *Paris*; and with it they floor their upper Rooms. *Worksep* is famous for Liquorice, which is counted the best in *England*. *Nottingham* is a neat Town; but one thing is most remarkable, *viz.* the many strange *Vaults* hewed out of the Rocks under the Castle; one of them of special Note for the Story of *Christ's* Passion engraven in the Walls, and cut by the Hand of *David* King of *Scotland*, when Prisoner here. He was taken Prisoner near *Durham* in the Reign of *Edward III*d, who at the same time had the King of *France* his Prisoner. *Echard*, p. 370.

Sherburn in *Dorsetshire* was formerly a Bishop's See; but it was transferr'd in the 11th Century to *Sunning*, and afterwards to *Sarum*. The Church is a stately Building, wherein are interr'd *Ethelbald* and *Ethelbert*, both Kings of *England*, 200 Years before the Conquest. But what is most remarkable, in the Time of King *Alfred*, *Swithelin* was Bishop of *Sherburn*, *Qui detulit ad Sanctum Thomam in India Eleemosynas Regis Aluredi et incolumis redijt*, that is, who carried the Offerings of King *Alfred* to the Church of *St. Thomas* in *India*, and returned safe. Here is a Voyage to the *East-Indies*, long before the famous Discoverers, *viz.* in the Time of King *Alfred*, who succeeded *Ethelred* in 871. *John Brompton*, *An. 15. Regis Aluredi.*

There

There was a Stone dug up in the Garden of Sir Thomas Spencer, inscribed with Characters of *China*, supposed to be brought by the afore-said Bishop Swithelin; that Country being quite lost to this Western Part of the World, till *Vasquez Gama* was sent by *Immanuel* King of *Portugal*, to make new Discoveries *An.* 1497; in which Year, tho' he recovered again the Way to the *East-Indies*, yet *Fernandus Andradus* discovered not *China* till 1517: So that, provided this Stone (which is very unlikely) was brought by some of *Andradus* his Company the very first Voyage, yet it can have been with us but 160 Years; and we may rather think it was brought as abovesaid. *Dr. Plott, History of Oxfordshire, p. 357.*

Bampton in Oxfordshire. In the Family of Mr. Wood there is an Account, as strange as true, of Knocking before the Death of some of the Family, which hath often happened in the same House; but moreover, Mr. Basil Wood, living at *Exeter*, heard the same kind of Knocking 1674. He wrote Word to his Father, that he, his Wife, Sister and Brother, (distinctly) heard upon a Table, as they stood by it, two Knocks as it were with a Cudgel; which Letter Mr. Wood shewed to several Gentlemen. About fourteen Days after his Wife died, and about a quarter of a Year after her Father (Mr. Lisset) died, both at *Bampton*; since which Time they have heard nothing more as yet. There have been such Warnings in other Families. *Dr. Plott, p. 205.*

Here-

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Herefordshire. There is a Plenty of Salmon in the River *Wye*; and whereas in other Counties this Fish is seasonable only in Summer, here they are in Season all the Year long; the Winter Salmons are fat and sound, when they are sick and spent in other Places. Here is the finest Wool in *England*, which equals, if it does not exceed, the *Apulian* in the South of *Italy*. There are several fine Fruits; and amongst the rest the red-streak Apple, which makes the best Cyder, thrives here to Admiration. Upon *Malvern-Hill* there are Medicinal Springs, good for sore Eyes, Cancers, and other Distempers. Two Miles off there is *Holy-Well*, which, besides its healing Qualities, removes Sun-burning and Freckles. *Atlas, Collier.*

Cheeshire. Although the Climate is cold, yet the Warmth from the *Irish* Seas seldom lets the Snow lie long, and dissolves the Ice sooner than in those Parts that lie farther off. *Bagmeer*, near *Brereton*, the Seat of the honourable Family of that Name, is celebrated for this *Prodigy*; that before the Death of any Heir of that House, the Bodies of Trees are seen to swim upon this *Meer*: They are Fir-Trees, which, notwithstanding the Moisture of the Ground, have been for many Ages preserved sound, black within as Ebony, and are used by Carvers to inlay Wooden Utensils, which is thought to be done by some clammy Bituminous Substance about them, that prevented their Putrification. The County is

famous

famous for Cheese; and the Grass near the City is so sweet, that their Cheese excels all the rest in *Cheshire*. *Collier, Atlas.*

Lancashire is noted for Oxen, accounted the largest in the Kingdom. Here are many uncommon Birds, as the Sea-Crow whose Body is blue, and Head and Wings black; a sort of Sea-Eagles, Razor-Bills, and Tropick-Birds. *Winander-Meer* has a delicate Fish called *Chars*, which are plentiful in one Part, but destroyed by the Pikes in the other; they are delicious when potted. This sort of Fish is also in *Kenington-Meer*, and reckoned better than the other. Near *Cartmel* a Medicinal Spring was lately discovered, and is much frequented for Cure of the Stone, Gout, and Worms. At *Rougham* there is a saline purging Fountain, and on the Coast there are Heaps of Sand, of which they make good Salt.

Omskirk. There is a bituminous Earth, from which is extracted an Oil like the Oil of Amber. The People work this Earth into Candles, and they burn very well. There is also a mineral Spring, called *Maudlin-Well*, impregnated with Sulphur, Ocre, and Marine-Salt: It hath performed notable Cures; and tho' it be far from the Sea, it casts up Sea-shells in great Quantities. On the Coast of *Lancashire* there are Quick-sands, so dangerous at low Water, that People must take Heed, that, in going a Foot, to use *Sidonius* his Words, *they suffer not Shipwreck, and be cast*
D *away*

away on the Land, especially about the Mouth of the River Cocar. *Cambden.*

Staffordshire. The best Alabaſter is found in this County, of which are made many Monuments in *Westminster-Abbey*. *Wrottesly* is noted for the Remains of a City about four Miles in Compass, where very large Stones have been found; one of them made an hundred Loads; another, after ten Loads were hewed off, required thirty-six Yoke of Oxen to draw it to a Malt-house, where it is a Cistern, and tho' very thick at the bottom and sides, wets seventy-four Bushels at a time. It may be a Question whether these are not as large as the Stones of *Balbeck* in *Syria*, which are accounted Wonders; one of them is twenty one Yards long, four Yards broad and four Yards deep; two of them each twenty Yards long, and the same Breadth and Depth, which shall hereafter be mentioned.

Pembroke, in *South-Wales*, situate upon a Part of *Milford-Haven*, one of the finest Harbours in *Europe*; it contains sixteen Creeks, thirteen Roads, five Bays, distinguished by several Names. At *Kilgarring* there is a Cataract in the River, called the *Salmon's-Leap*, because they take their Tail in their Teeth and spring over the Cataract. Off of *St. David's* is *Ramsay-Island*; and adjoining to it are the Rocks called *the Bishop and his Clerks*, which are resorted to by several sorts of Birds; they leave the Place in *August*, commonly return about

about *Christmas*, stay only a Week at this time, and come again at Breeding-time. There are also Puffins, and those called *Harry-Birds*, which breed in Holes like Rabbits, and are caught with Nets; some of them breed upon the bare Rocks, without any Nest. *Atlas.*

On this Coast a sort of Sea-weed is gathered in the Spring, and, after being cleaned, is made up into Balls, which the Inhabitants call *Black-butter*: Some eat it raw, and others fried with Oatmeal and Butter. It is reckoned Sovereign in all Distempers of the Liver and Spleen, and against the Stone. On the same Coast is *Bossharston-Meer* so deep it could never be sound-ed. It bubbles, foams and makes a Noise against a Storm, that is heard ten Miles off. It is supposed to have a Communication with the Sea. They have a kind of Fuel called *Culm*, which is the Dust of Pit-coal mixed with a third of Mud or slimy Dirt, and being made up in Balls, it makes a sweet and durable Fire, with very little Smoak, tho' wet. *Atlas.*

Merionethshire. At *Harlegh*, in the Neighbourhood of this Place, there was a strange fiery Exhalation, which much annoyed the Inhabitants *Anno Dom. 1694.* It continued above eight Months, burnt several Ricks of Hay, and so infected the Air and Grass, that it occasioned a Mortality among Cattle. It was a blue weak Flame, and did no Hurt to Men, who frequently went into it to save their Hay; and they observed that it was extinguished or

repell'd by any great Noise, as blowing of Horns, firing of Guns, &c. It crossed a Bay of the Sea eight or nine Miles broad, and proceeded constantly to and from the same Place. The Cause was ascribed to Locusts, supposed to have been drown'd or died some time before; but this is not probable, such an Effect being never known, where Locusts are more common, and larger than any that have appeared in those Parts. *Cambden, Philosophical Transactions.*

* It is called *Pimble Meer.*

In this Shire, N. E. there is a Lake * that covers at least eight score Acres of Ground; and such is the Nature of it by common Fame, that no Land-Floods can make it swell, but a high Wind raiseth it mightily, so that it overflows its Banks. It is also observed that the River *Dee* which enters into it on the South side, and comes out again on the North, does not mix its Water with it. For Proof hereof it is alledged that there are no Salmons in the Lake, but very many in the River *Dee*; and that the Fish called *Guniad*, which are bred in the Lake, are never seen in the River. This Country is very mountainous; and the Hills are so high and straight up, that Men may discourse with one another on their Tops, and yet hardly can meet at the Bottom in a Day's time. *Giraldus, Collier.*

Brecknockshire. *Mounch-Denny* or *Cadier Arthur*, that is, *Arthur's Chair*, a prodigious high Hill, of which this Wonder is reported by *Speed*, attested to him by eight Persons of Credit,

Credit, who gave this Account upon their own Trial: That on the Top of this Hill they had often cast down from the N. E. Rock, their Cloaks, Hats and Staves; but they were still repuls'd and blown up, so that none of them would fall. This they attributed to the Clouds raking much lower than the Top of the Hill. They affirmed that nothing would descend from thence but Stones, or Things of Metallick Substance; perhaps the Air itself, to a certain height, is stronger to support those Things and hinder them from falling. There are two Peaks on the Top, and between them a Fountain that had Trouts, tho' no Water ran from it. *Collier, Atlas.*

In *Wales* there are very high Mountains, called the *British Alpes*, alias *Snowdon-Hills*, one of which so over-tops the rest that he seems to thrust his Head up into Heaven. On the very Top of these Mountains there are Pools, and one Meer, in which floateth a wandering Island. *Giraldus* reports that there is another Meer, in which are Fish with one Eye only. *Gervase of Tilbury* saith, "There are high Hills raised upon hard Rocks, on the Top whereof the Earth is crufted over with such a Coat of waterish Moisture, that wheresoever a Man does but lightly set his Foot, he shall perceive the Ground to stir the length of a Stone's-cast from him. *Cambden. p. 667.*

Glamorganshire. Off of *Caerdiff-Point* is an Island called *Barry*, from *Baruch* a holy Man buried there. In a Rock or Cliff hereof, by

the Sea-side, there is a very small Chink, to which if you lay your Ear, you shall hear as it were the Noise of Smiths at work; one while blowing the Bellows, another while the striking of Sledge and Hammer, sometimes the Sound of a Grindstone and Iron Tools rubbing against it, as also the hissing Sparks of Goads from the Furnace. *Cambden, Giraldus.* Dr. *Gibson* in *Cambden* says, “ that the Noise is “ heard at *Wormshead-Point*, and a good way “ further; and is occasioned by the Motion “ of the Sea under the Rock, according to the “ Size or Form of the hollow Places.” Near *Cowbridge*, *Newton* is famous for a Well, which ebbs at full Sea, and flows at the Ebb. *Atlas.*

Flintshire. There is a Hill hard by *Kilken* a small Village near the River *Alen*, in which Hill there is a Well, the Water whereof rises and falls after the manner of Sea-tides; a Wonder in Nature in one way, as there is another on the contrary: At the Mouth of the River *Cluid* there is a Valley, which seems to carry a lower Level and to lie under the Sea; yet the Water never overfloweth the Vale, but is as it were, by a natural Obstacle, stayed within the very Brinks of the Shore, not without the exceeding great Admiration of God’s Providence. *Cambden*, p. 679, 680.

Shropshire. *Pickford*, there is a Spring constantly supplied with an oily unctuous Matter that swims upon the Water, which the Inhabitants skim off and use instead of Pitch; it is said

said to be good against the Falling Sickness and Wounds. There are Allum-Springs, which Dyers use instead of Allum. *Sbrewsbury*: Here were found Teeth of dead Men, three Inches long, and as much round, and Thigh-bones full a Yard long. In *Staffordshire* there is a Pit-coal so firm that polished Utensils are made of it as black as Jet. *Newingham* is noted for Medicinal Springs, that seem to flow through Allum-Mines: The Water is good for green Wounds, diuretick of itself, drank with Salt, laxative; with Sugar, restringent. *Collier*.

Somersetsbire. In the Year 1672, there was a freezing Rain; and what made it more remarkable was, that tho' the Branches of Trees were so loaded with it that they broke off with great Noise, there was no Ice to be seen in the Rivers or Ponds. A Gentleman who gave this Account, says, that a Sprig of an Ash-tree, covered with this icy Rain, was brought to him, which weighed sixteen Pounds, tho' some was melted off by the Hands that brought it; and that when the Ice was quite melted off, the Sprig weighed but three quarters of a Pound: Orchards were much damaged, and the Roads made unpassable by the Branches of Trees broke off by the Weight of the Ice. This violent Frost was succeeded by violent Heats, which caused excessive Sweating, and made Flowers as forward as in *May*; and an Apple-tree had Apples as big as ones Finger's end at New-Year's Day. *Philos. Transactions*.

The Wonders of Nature

Near *Stow* there is a large Spring that never dries, and the Stream that runs from it covers every Thing it meets in its Way with a stony Crust ; and what is remarkable, it hath not that Effect in the Fountain it self, nor within twenty Yards of it ; but about forty or fifty Yards from the Fountain, where there is a small Cataract, about the Height of a Man, it crusts every Thing with Stone, and makes the Sides of the Bank look like a hard Rock. The River *Avon* furnishes *Bristol* with a Dish hardly found elsewhere : it is a sort of small Eels of a black Colour ; they catch Multitudes, and so order them, that they slip off their black Skins, and the Meat is very white, which they make up into little Cakes to fry. They come only about the Vernal Equinox.

Atlas.

The River *Avon* falls into the *Severn* below *Bristol*, as doth the River *Stroud* a great Way above. The Water of this River hath a peculiar Quality to give the right Tincture to Scarlet, which enriches the Town of *Stroud*, where they dye the best Scarlet of any Place in *England*. In the *Severn* there is a remarkable Tide called the *Hygra* or *Boar*, which does not come in gradually as in other Rivers, but with an extraordinary Rapidity ; it rolls in with a Head two, three or four Foot high, carrying every thing before it, and overflowing its Banks. The Tides here are also variable ; they are largest one Year at the full Moon, and next Year at the Change ; and in one Year

the

the Night Tides are highest, and in another the Day Tides.

Bedfordshire is noted for producing Wood for Dyers, the best of which sells at 18 *l.* a Ton; it is both a fruitful and healthful Country. Dr. *Slare* gives an Account that his Grandfather, who lived in the Town of *Bedford*, in the 85th Year of his Age, had a new Sett of Teeth, and his Hair changed from white to a dark Colour; he ascribes this to a frequent Use of Sugar; so that he continued in good Health till he was a hundred, and then died of the *Plethory* for want of Bleeding. There is a like Instance in *Northumberland*, at *Lesbury* near *Alnwick*: The Minister of the Place, who lived in the Reign of King *Charles I.* failed by Infirmary of Age, and had left off preaching, being unable, and having lost all his Teeth; but he recover'd Strength, his Teeth renewed and he preached again. *Cambden. Philos. Transf.*

Dunstable in *Bedfordshire* is remarkable for a Woman that had nineteen Children at five Births. It appears from an Epitaph in the Church, that she had at three several Births three Children each, and at two other Births five each. Here are four large Ponds, which are never dry, tho' supplied only with Rain Water. It is remarkable, that no Springs are found hereabout; the Inhabitants have dug for Water, but could find none at twenty-four Fathom deep; and the Reason must be, that there want free Passages from the Sea, and those

those large Ponds may be supplied by Rain. In *Alderney*, one of our Islands upon the *French* Coasts, there is a great Ridge of Rocks; from one of which there gushes out a fine Spring of fresh Water, to the great Benefit of the Island, where there is not Earth nor Place for Rain to maintain it. *Atlas.*

Guernsey, another Island belonging to *England*; here no venomous Creature will live. It is naturally fortified by a Ridge of Rocks: One of them call'd *Smyris* affords Emeralds, with which Lapidaries polish Jewels, and Glasiers cut Glafs. *Jersey*, another Island on the *French* Coast, belonging to *England*. Here are found *Barnacles*, which, says the Author, breed in rotten Wood tossed long in the Sea. There are *Partridges* with red Feet, with Eyes like a *Pheasant*, and Feathers of divers Colours, which make them very beautiful. There is a peculiar sort of Sea Fish call'd *Auris Marina*, shaped like a Man's Ear; it is like a Lump of white Pulp, sweet and luscious. Here are Toads and Lizards, but never known to do any hurt. *Atlas.*

Sarke, another *English* Isle near *Jersey*, fix Miles in compass. It has a Harbour and a small Fort, not accessible to above two at once. This Place, in the Year 1558, was surprized by the *French*, but recover'd by a *Fleming*; who pretending he had a dead Friend in his Ship, promised the Governor a good Present, if he might have Liberty to bury him in their Chapel: the Governor granted it, on
Con-

Condition his Men should be searched and disarmed, which was accordingly done; but the Coffin being filled with Arms, they opened it, and drove out the *French*; Part of them being sent to receive the Present, they were by the Captain's Order kept Prisoners in the Ship. There is the Fish called the *Base*, so plentiful in this Sea, that Cart-Loads are drawn up at a time here and at *Jersey*. *Atlas.*

Suffolk, anciently inhabited by the *Iceni*, was part of the Kingdom of the *East-Angles*. The Air is so generally sweet and wholesome, that able Physicians have often prescribed it for the Cure of consumptive Patients. *St. Edmund* was the last King, when his Country was invaded by the *Danes*, who routed his Army, took himself Prisoner, and put him to Death, because he would not renounce the Christian Religion: They bound him to a Stake, and fill'd his Body full of Arrows, making a Pastime of their Cruelty; but he gave a great Example to this Country to testify the Truth of Christianity; for which he was afterwards named *St. Edmund*: He was interred at *Bury*, which from him took the Name of *St. Edmund-bury*, a Town most pleasantly seated, and much frequented by the Gentry, as a Place of the best Air. *Cambden, Speed.*

Eye, in this Country, is an ancient Corporation, and gives the Title of Baron to the honourable Family of *Cornwallis*. In the Neighbourhood, the Lord *Cornwallis* hath a handsome

* *L'ey*, an
old *Britijb*
Word, fig-
nifying a
Place.

some Seat call'd *Broom-Hall*, with pleasant Gardens adjoining to *Oakley**, so named from the Oaks, that useful Product of *England*, which are thought to be the best in the World. About a Mile off is the Village of *Hoxne*, where *St. Edmund* was martyr'd. On the Coast near *Orford*, a Seaman was taken by the Fishers, as we have an Account from *Ralph* of *Coggeshal*, an ancient Writer in the Time of *Henry I.* All the Parts of his Body were of human Shape; he had Hair on his Head, a long picked Beard, was exceeding hairy about the Breast, liv'd upon Meat, especially Fish, six Months, and then escaped to Sea. *Atlas.*

Broom-Hall shews one of the greatest Curiosities, a perfect petrified Oyster, found in a Field adjoining: It was opened with a Knife, as other Oysters. I have seen it, and cut a little off its Edge; it is a sort of fine Stone, and every Part like an Oyster, the rough Coat of the Shell of the usual dark Colour, and the Inside white as the Natural, each Shell having a blue Mark, where the Fish was fastened to them. The Fish is exactly like, but brownish through the Change: it is of a pretty large kind, of the round Figure; there is also a single Shell of another sort, larger and of a longer Form, and several less scattered about the same Place, where Men were digging for Clay *Sept. 1. 1739.*

This Curiosity is more remarkable, on account of the Place, which was ten Feet and nine Inches under Ground, beneath a Bed of strong

strong Clay, where the Earth began to be mixed with Sand. I went down into the Hole to view it; the Ground was in such a State as only could be laid by the general *Deluge*. The Bed of Clay is nine Feet thick, not equal at the Top, but indented with a light sort of Earth, and had not been broken before. The Place is eighteen Miles from the Sea, in the nearest Way to *Dunwich*, the Ground a little rising from thence, the Air sweet and wholesome, as it is generally in *Suffolk*. "*Able Physicians have prescribed this County Air for the Cure of their consumptive Patients.*"

Bodies are usually petrified by Water of an extraordinary cold Nature; but here was no Water at all: Such a Change is sometimes effected by Earth; and when Animals so changed, that once belonged to the Sea, are found buried deep under Ground, and far within the Land, it is a certain Argument of a *General Deluge*, beyond that of Trees being under Ground, which might happen some other Way. *Flaminius Vacca*, quoted by M. *Montfaucon*, makes this a sure Evidence, that Pieces of Wood were found in Clay, in the Foundation of St. *Peter's Church* at *Rome*, some of them black, and as heavy as Stone; some really petrified. I have been told, says he, that these Pieces lie in the Pope's Wardrobe. *Montfaucon's Travels*, p. 323.

It is observed by Mr. *Cambden* in *Yorkshire*, in that Part call'd *Richmondshire*, that Stones, like unto Sea-Winkles and other Fish, are found

* *Orosius*
 was a Priest
 of Spain,
 Disciple of
 St. *Austin*.
 He wrote
 a History
 of the
 World,
 from the
 Beginning
 to the Year
 of Christ
 416.

found on Tops of Mountains. If these, says he, be not *Wonders* in Nature, I suppose with * *Orosius* that they are Tokens of the general *Deluge*, when the Sea overflow'd the Earth. The soundest Writers teach that all Mankind perished, except a few Persons: They also testify that some were ignorant of the Times past, and knew not the Author of Times, yet gather'd as much by those Stones which we find on Hills remote from the Sea, resembling Cockles and Oysters, yea and oftentimes eaten hollow by the Waters. *Cambden*, p. 727.

It is very probable, that Bodies of Stone, which resemble Animals, some time have had Life. There are also many sorts of Shells that are found upon the Sea Shore, which never had Life, and some of the same kind upon Hills; yet even these are wonderful in their Variety, and serve for the Diversion of Mankind. "Tully, when he celebrates the Friendship of *Scipio* and *Lelius*, who were the greatest as well as the politest Men of their Age, represents it as a beautiful Passage in their Retirement, that they used to gather up the *Shells* on the Sea-shore, and amuse themselves with the Variety of Shape and Colour, which they met with in those little Works of Nature." But those that study Nature, discover also many Secrets, even in those less regarded Works which they cannot perfectly comprehend, and conclude their Speculations with *Amazement*.

It is a Wonder in Nature, that Bodies are changed into another kind; and some having been Animals, keep their Form, tho' deprived of Life; but others retain Life where it is a Wonder how they live. Fishes that belong to the Waters live like Worms in the Earth. Sand Eels are buried in the Sand, and are rak'd out with Iron Rakes: "Other Fish are found far within Land, and Men go a Fishing with Spades; such are found at *Ferneby* in *Lancashire*, where they dig for Turf; there is a Mixture of dead and blackish Water, as Mr. *Cambden* observes: But, says he, in *Papblagonia*, many and good Fishes are got by digging in dry Ground: And *Seneca* says pleasantly, Why should not Fishes enter into Land, if we pass over the Sea." We may speak more seriously, the Creator shews an unlimited Power, *and hath so done his marvellous Works, that they ought to be had in Remembrance*, Psal. III. 4.

There are in *Suffolk* several Churches built with Flint Stones of several Sizes, generally not so large as a Man's Fist, and join'd together with a dark-colour'd Cement, a remarkable sort of Building; particularly the Church Porch at *Oakley* makes a pretty Appearance somewhat like Painting, the Stones being of divers Colours, white, black and yellowish; the Cement must be very strong, and the Art very considerable, which has fastened such small Stones so firmly together. The Porch-Front is adorned with oblong Squares set in
Frames

Frames of other Stone, and crown'd with the Flower-de-luce ; the Ground is mixed with Flints, but now not so plentiful ; yet I do not find the Land to be worse where they have been carried off, as it has happened in some Places.

It is therefore questioned whether Arable Land should be cleared of round Stones : All Stones have Salt in them, that in some measure improves Land ; for tho' it be lock'd up with Sulphur, so that Frosts do not make the Stones run, yet there is an Emission of saline Steams. I have seen, saith Dr. *Plott*, Fields cover'd with Flints and Pebbles, produce better Corn than where there were none. The Colonies that came to *Syracuse*, after they had cleared the Ground of all the Stones, could have no Corn till they had laid them on again ; for which the Salt is a better Reason than what is brought by *Pliny*, tho' there may be some Reason in it too, that Stones of a round Figure keep the Seed warm, and so contribute to its Nourishment.

Norfolk. *Norwich* was a noted City before the Conquest, and now has a great Trade in Worsted-Stuffs, of which it is reckon'd one hundred thousand Pounds worth is sold here in a Year. *Great Yarmouth* is famous for the Herring-Fishery ; that Fish abounds in this Coast, and is best cured in this Place. Over-against *King's-Lyn*, on the other side of the River, is the remarkable Wash upon a large Tract of flat Ground, where the Tide comes

in

in very sharply, and sometimes surprizes People passing over the Sands. King *John* going this way into *Lincolnshire* against the Barons, was with his whole Army in Danger of being lost; all his Waggon, Treasures, &c. and his *Regalia* were carried away and swallowed up in the Mouth of the River *Welland*. *M. Paris* says the Earth open'd in the Midst of the Floods, and plung'd them into the Abyss. *Echard, Atlas.*

Cumberland. *Carlisle* is an ancient Town, and was a *Roman* Colony, 228 Miles N. W. from *London*. The *Romans* built the famous *Picts* Wall, eighty Miles in Length, carried on from this Place cross the Island, passing through *Northumberland* to the Fort of *Tinmouth*. The *Picts* were so called from painting their naked Bodies; they claimed Kindred with the *Scots*, as being both originally from *Scythia*, having come from thence into *Germany*; and they join'd to make Incurfions into *South-Britain*. At the Mouth of the River *Irt*, near *Ravenglass*, are found Pearl-Mufcles. In the South Part are rich Veins of Copper, and the *Lapis Calaminaris*, out of which Brafs is extracted. *Atlas, Collier.*

Northumberland. *Newcastle* is famous for Coal-Mines, from whence Coals are sent away by the River *Tyne*, out of this County and *Durham*. It was formely a Custom amongst the *Northumbrians* to sell their Children into foreign Countries. It happen'd that two comely Youths being brought thence to *Rome*, *Gregory*,
E Arch-

Arch-deacon of that City, had a View of them, and enquired what they were. He was answer'd that they were *Angli* of the Province of *Deira*, under *Alla* King of *Northumberland*, and by Religion *Pagans*: Upon which he broke out into this Allusion to *Angli*, *Deira* and *Alla*, That the *Angli* being like Angels, should be snatched out of *Deira*, that is, from the Wrath of God to sing *Allelujah*. *Collier*.

This same *Gregory* came to the Popedom, and was called *Gregory the Great*, who was put in mind, as *Beda* says, of this Affair by a divine Inspiration, and sent *Austin* and some other Monks to preach the Gospel in *England*, in the Reign of *Ethelbert*, the fifth King of the *Saxon* Race, about the Year 596. *Austin* had good Success, was made Arch-bishop of *Canterbury*, from which Beginning *England* became subject to the See of *Rome*; although at first it was opposed by the Clergy; for Christianity had been planted here long before, and they knew nothing of the Bishop of *Rome*. *Demotbus* of *Bangor* spoke to *Austin* in the Name of the rest, and by their Approbation, That they owed no subjection to the Bishop of *Rome*, but the Duties of Love and Charity; and that they were govern'd under God by the Bishop of *Caer-Leon*. *Collier*.

Durham City is noted for the Translation of St. *Cuthbert's* Body from *Holy-Island*, called also *Lindisfern*; and the See was removed to *Durham* about 634, whence the City took its Beginning, and was endowed with great Privileges

leges by the *Saxon* Kings, and afterwards by *Edward Ethelstan*. The Cathedral is a strong and stately Structure, begun by *William de Careleph* and finish'd by his Successor *Nicholas Fernham* in the Year 1242. The Castle was built by *William* the Conqueror. The famous Battle of *Durham*, and the Victory obtain'd over the *Scots*, was in the Year 1346, and on the same Day on which *Edward III.* obtain'd another Victory over the *French* at *Cressy*. *David Bruce*, King of *Scotland*, was taken Prisoner, and *Nevil's-Cross* was erected in Remembrance of the Victory; of which there are some Remains at this Day. *Cambden, Collier.*

Darlington. Near this Place there are three deep Pits full of Water, at a small Distance from one another, called by the People *Hell-Kettles*, because the Water in them, by the *Antiperistasis*, or Reverberation of the cold Air striking thereupon, is made hot. *Baker's Chronicle* says they are not to be fathom'd; but a later Account says a Bottom is found at thirty Yards deep, perhaps so far filled up in time. Bishop *Tunstal* first observed that these Pits have Passages under Ground, by finding that Goose in the River *Tees*, which he for a Trial had marked and let down into one of them. *Cambden, Atlas.*

These Pits were caused by an Earthquake, which raised the Ground like three Hills on a great Height, and in the Evening those Hills sunk down, and left those Water-Holes. The Chronicles of *Tinmouth* say, in the Year 1179,

on *Christmas-Day*, the Ground heaved itself up aloft, like unto a high Tower, and so continued until the Evening, and then fell with so horrible a Noise that it frightened all the neighbouring People; the hollow Earth swallowed it up, and made in the same Place those deep Pits. They are near the River *Tees*, which divides *Yorkshire* from the County of *Durham*. *Cambden, Atlas. Lat. 55.*

The River *Were* divides the County, and therein below *Aukland*, there are many large Stones, upon which if you pour Water, it sucketh in a saltish Quality, a thing that happeneth not elsewhere, saith *Cambden*. And at *Butterby* near *Durham*, a flat Rock lies along the River, out of which issueth a salt reddish Water, which by the Heat of the Sun becomes so white, and groweth to a thick Substance, that the People dwelling there gather from it Salt sufficient for their Use. On the other Side of the River, there is a medicinal Sulphur-Spring, which hath a strong nauseous Smell, and presently dyes Silver of a Copper Colour. This also issues from a Rock, and boils up from under the Surface. *Cambden.*

I did not design to speak of common Animals, but shall here take notice of the Bees, as a wonderful Work of the Creator, which shews Wisdom designing things for certain Ends. There is a Wonder in every Creature, but this is extraordinary remarkable, that these Creatures join together, and form a kind of Government, as if they had Reason to guide them,

them, and for Man's Convenience, they hang upon one another in a Cluster, that they may be placed in a Hive. There is a remarkable Story from credible Persons, near *Sherburn*, hard by *Durham*, a poor Man's Swarm settled in a rich Man's Garden, who challenged it as his own. The poor Man wish'd it might appear, to whom the Swarm of right belong'd. The Swarm follow'd him, and hung upon his long Beard, by which he carried them to his own Hive.

The Bees have Kings and Officers, which keep Order amongst them. *Pliny* saith they have private Councils, and publick warlike Actions. *Aristotle* saith that in a high Wind, they carry a little Stone in their Feet, wherewith they poise themselves, and that they delight in a Sound, which makes them sit down in the next Place; but *La Cerda* ascribes it to a Fear of the Noise. They love the King so intirely, that they never suffer him to go abroad, but as it were with a Guard about him. For they cannot live without a King; if he dies, they presently decay and squander away to nothing; when any Bee dies in the Hive, the Bearers carry him out forthwith and bury him.

York-City, Lat. 54. 10. Some Authors say that *Constantine* the Great was born here; it is certain, that here his Father died, and the Son was proclaimed Emperor; whence the Author of an Oration says, *Fortunate Britain,*

and now blessed above all Lands, which first saw Constantine Emperor An. Dom. 306.

The Cathedral first built in the Year 627 was ruined by the *Danes*. Some Time before, Blood rained from the Top of the Roof in the North Part of it, which was seen by *Alcuine*, who foretold the following Calamities: *What signifies, says he, that raining of Blood, may it not be thought that Blood is coming upon the Land from the North?* The *Danes* came from that Quarter, and a bloody Battle was fought within the City. Anno 867 the Cathedral was rebuilt, and is one of the most magnificent Structures. *Cambden*, p. 705.

Flamborough Head. It was so named by the *Angli*, who dwelt at *Angloen* in *Denmark*, the ancient Seat of the *English* Nation, in which there is a Town call'd *Flemsburg*, whence they gave this Place its Name, having landed here with the *Saxons*. Near this Place are certain Bourns, commonly call'd *Vipses*, which *Cambden* says he could not find out, but takes it from *Walter* of *Heminburgh*, and from *William Newbrigenfis*, who was born near the Place. Those famous Waters, commonly call'd *Vipsies*, rise out of the Earth from many Sources, not continually, but every second Year, and being grown into a great Bourn, run down into the Sea by the lower Grounds, which when they are dry it is a good Sign; for their breaking out and flowing portend a Dearth. *Cambden*, p. 715. The later Author of the *Atlas* saith they

they break out in the *Downs* after great Rains, spout up Water to great Height, and sometimes flow from Rocks.

At *Hull*, in the Town-Hall, there is the Effigies of a *Greenlander* sitting in his Canoe. He was taken by a *Hull* Man in 1613. The poor Savage was so sullen he would not eat, and died in three Days after he was taken. The Boat is cover'd with Seal Skins, and so fitted to the Man's Waist that no Water can get in. He has one Oar about six Foot in length, and a Paddle six Inches broad at each End. He rows so swiftly as to out-run a Boat of ten Oars, and could never have been taken, but that his Paddle broke. Their Swift-ness occasioned a Mistake; because they were quickly out of Sight, they were supposed to dive under Water. The Boats are shaped like a Weaver's Shuttle, and are rowed either way. *Atlas.*

Scarborough Castle stands upon a very high Rock, and there is a Fountain in the Rock which serves the Garrison. The Spaw is very famous, springs from the Bottom of a high Bank, and is sometimes overflow'd by Spring-Tides; it boils up like a Pot to the Quantity of twenty-four Gallons *per* Hour, has a pleasant acid Taste, and springs through Vitriol, Nitre, Allum and Salt. *Knaresborough* is also noted for medicinal Springs; and there is a dropping Well, the most famous in *England* for petrifying Wood, which is no sooner put into it, but it is crufted over with a stony Substance,

Substance, and by Degrees turned all into Stone. On *Ownesbury* or *Roseberry Topping*, a very high Mountain, a Well issues from a great Stone, and the Water is good for sore Eyes; it is an Almanack to the Country-men, who always expect Rain, when a Cloud appears at the Top. *Atlas.*

Whitby. *Cambden* mentions Grounds hereabout, upon which wild Geese fall down, when they fly over them; this he ascribes to some Quality of the Ground, to which the Geese have an Antipathy. Here are Stones found, resembling the Wreathes of a Serpent, which Naturalists call *Cornua Ammonis*; some think them petrified Shell-Fishes, and others that Nature hath so produced them. At *Huntley-Nab* Stones are found so exactly round as if artificialy made for Cannon-Balls, which being broken contain stony Serpents, wreathed up in Circles, but generally without Heads. *Richmond* is called a Shire within *Yorkshire*, in which there are several Mountains, on the Tops whereof are found Stones, resembling Cockles and other Water-Animals; many of them are found in Rocks and Beds of Limestone. *Cambden, Atlas.*

There is great Variety of Shells and Stones of divers Figures, which learned Men call *Lusus Naturæ*, the Sport of Nature; and it may be asked for what End they were made? They may be made for Man's Diversion, and for Uses not yet known, which will employ Mankind to search out. However they shew a
Design

Design in the Creator, to make such a Variety of things, which may excite our Admiration. But some are found to be medicinal, and Time may discover more, with several other Uses; Nature doth nothing in vain, and probably the God of Nature has intended that Men may be either diverted or employed with harmless Curiosities; and that finding many things above their Understanding, in these little Works of Nature, they should not curiously enquire or determine about the Divine Being which is abundantly too high for them.

There are some Instances; small Stones like Shells found in the Fields at *Teynton* and *Burford* in *Oxfordshire*, which being made hot and put into Drink, are there accounted a present Remedy for the *Stitch*. There is a kind of Shells, call'd *Venus' Shells*, stain'd with several pretty Colours, which are good against those Ulcers in the great Corners of the Eye, because of their admirable drying Quality, and as *Rondeletius* saith, we have no Reason but to believe, that most other Shells may be of equal Virtue. There is in *Cornwall* a kind of Stone call'd the *Warming-Stone*, which being heated at the Fire, retains its Warmth a long Time, and gives Relief in several Pains, particularly in that of the inward *Hæmorroids*. Dr. Grew, Dr. Plott.

There are Stones of several Sizes, called *Selenites* or *Moon-Stones*, having a pretty round Figure, some of which are of eminent use, good, taken inwardly, for many Distempers,
number'd

number'd up by *Galen* and *Cerutus*; and externally, to take away the Blemishes of the Face. Out of the burnt *Selenites* is made the best *Gypsum* for Plaistering, Images, &c. When burnt it turns to a pure white Calx. Of this the *Italians* make those curious counterfeit Tables, like Marble inlaid with precious Stones, in the Forms of Animals, Plants, &c. The way of making them is taught by *Kircher*. But, says Dr. *Plott*, a Friend of mine has a better Method, who intends to attempt to make them in *England* and of *English* Materials.

There are many useful Inventions peculiar to *England*, and several Improvements of foreign Inventions. At *Oxford*, Friar *Bacon*, who lived there four hundred and fifty Years ago, invented several Works in Glass, and among them the famous Telescope, which since his Time has been improved. By this Instrument things afar off are represented near. By this the Heavens are enlarged, innumerable Stars are discover'd, which are not visible to the naked Eye. The *Milky-Way* is a Multitude of Stars; in the Compass of the Seven-Stars called the *Pleiades*, there are discovered seventy two; and the Moon is known to be an earthy Body, wherein Sea, Lands and Woods are observable; a new Scene of Wonders!

Bacon's Inventions in Glass were so surprizing in those Days, that he was accused of Magick in the worst Sense. He suffer'd much Hardship upon that Account by Prosecutions, till he made Complaint to Pope *Clement* the IVth,

IVth, who was a Person of better Judgment than many of the Learned of those Times; and the Friar was honourably acquitted; yet he concealed several curious Inventions, lest he should give Offence; and others have borrow'd from his Writings. He was Author of the Reformation of the Calendar, and made the first Motion about it to the said Pope, altho' it was not performed till the Time of Gregory the XIIIth. Dr. *Plott's* Natural History of *Oxfordshire*.

The Invention of drawing Pictures by microscopial Glasses is owing to Sir *Christopher Wren*, and also a more speedy way of painting in Copper. *Apelles* and some others are famous in Antiquity, and the Original of Painting is very ancient; but in latter Times there have been some particular Improvements, as the way of painting a Face, which looks directly upon all its Beholders; it is a surprizing Effect of the Painter's Art, and is caused by turning the Nose to one Side and the Eyes to the other. The Author hath no Account of the Inventor. Dr. *Plott*.

Phyick has been much improved in *England*. Dr. *Harvey* discovered the Circulation of the Blood, and Dr. *Higmore* was the first that treated of the Structure of Man's Body, adapted to the then new-received Doctrine of the Circulation. He also discover'd the Vessels and Fibres of the Spleen, which by ancient Anatomists were thought to be Veins. By this Means the Work of Nature, so wonderful

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derful in human Bodies, has been better understood, to the great Advantage of the Medicinal Art; and other great Improvements have been made by the learned Dr. *Willis*. Dr. *Plott*.

The Air-Pump and the *Barometer*, and many curious Operations, were invented by the famous *Robert Boyle*, Esq. His Chymical Experiments are Wonders of Nature drawn forth by Art. He gave the first Hint of the noble Fire-Engine, by his Experiments upon the Power of Air; and it may as properly be call'd an Air-Engine, because the Air bears a great Part in the Operation. It has been brought to Perfection in our Time, and is a Compound of curious Art and Philosophical Science. It draws Water from the Coal-pits seventy or eighty Fathoms deep, instead of many Horses employed in that Work, and brings up a much larger Quantity.

There is a strong House built for the Purpose, and therein a large Furnace-Fire, under a Boiler full of Water, and above that a hollow Cylinder of twenty Inches or more Diameter, to which a Pestle is exactly fitted, and this hangs at one End of a thick Beam: At the other End are the Speers, which draw up the Water through Tubes, within a Pit adjoining to the House. The hot Water first drives up the Pestle within the Cylinder, raising the inner End of the Beam and causing the outer to fall down; then the Air being rarified within, the Pressure of the Air without brings down the inner End and raises the outer to draw Water. So the Beam constantly moves up and

and down like a Balance, by the Help of some Movements, and is easily stopp'd or set a going.

There are several of these Engines near *Newcastle* upon *Tyne*, and in the Parishes of *Houghton-le-Spring* and *Chester-le-Street*, in the County of *Durham*, from which Places Coals are carried to the Rivers in Waggon that run upon Rails or Frames of Wood, then by Water-Carriage to the Ports of *Sheilds* and *Sunderland*, from whence vast Quantities are brought to *London*, &c. The Pits are sunk down to a Seam of Coals, which Seam is about five Foot thick, and is worked round about, first like unto narrow Lanes, and afterwards cross-wise, till the Place is like a Room supported with Pillars two hundred Yards or more in Circumference. *Lat. 55.*

There are many Rarities in *Gresham-College* at *London*, belonging to the Royal Society; but these being brought from other Countries, I shall only mention two or three in this Place. There is the Body of a Flying-Squirrel, which seems to be the same that *Scaliger* describes under the Name of a Flying-Cat. When he has a mind to cross any Water for a good Nut-tree, he trusts not to his flying Property; but he picks out a Piece of Bark for a Boat, sits upon it, and erecting his Tail for a Sail, makes his Voyage securely. This was brought from *Virginia*; of which more is said in its proper Place. *Dr. Grew.*

There

There is the Skull of a River-Horse ; his Teeth are prodigious great, some of them being six Inches round about, and nine Inches long. His Body is four Yards and a half long, about two Yards high, tho' short legg'd, his Head almost like that of an Ox. Rings made of his Teeth are said to be very effectual against the Cramp. *Bochart* proves this Animal to be the *Behemoth* in *Job*. There is the Skeleton of an *Ægyptian* Crocodile, which the same Author says is the *Leviathan*. This is only fifteen Foot long, but there are much larger ; as shall be observed hereafter.

There is a Leopard's Skin, and his Body dissected. He is in all Parts like a Cat, and his Actions much like. But the Bone whereon his Claw is set, receives into it a little Groove, and the Bone again is rivetted into the Claw, by which means he is more strong and sure in grasping his Prey. This shews the nice Contrivance and a Design of the Creator, as in many other Instances, in fitting things to proper Ends ; and there is a strong Impulse upon these Creatures, by which they are the most tender Creatures over their Young, whilst the most violent to other Animals ; a clear Testimony of a wise Providence, which so influenceth those wild Creatures.

There is the *Slick Sailor*, a kind of Shell-Fish, near a Quarter of a Yard long, brown on the Back and black on the Belly. He is famous for the Art of Navigation. He rises to the Top of the Water with his Shell inverted,

verted, and being there, returns it; then having a thin Membrane spread against the Wind for a Sail, two Feet for the Rudder, and two for the Helm, he sails along. If any Fear arises he pulls all in, and filling his Shell with Water, immediately sinks himself to the Bottom of the Sea. For this Account Dr. Grew quotes *Aristotle, Rondeletius and Scaliger.*

There is the Body of a *Pelican*, which hath a wonderful Qualification. This Creature has a Bag under his Neck, capable of two Gallons of Water, which he can open or contract as he pleases, and there he keeps a Stock of Meat, which by Degrees he presseth down into the Gut, as Occasion requires. It is probable the Meat herein being warmed and made a little tenderer, the Female disgorgeth Part of it, wherewith she feeds her Young, which might occasion the Fiction, that this Bird feeds her Young with her own Blood. Dr. Grew.

There is a kind of a *Hair-Worm* about a Quarter of a Yard long, little thicker than a Horse-hair. It is commonly believed, but a Mistake, says Dr. Grew, that this sort of Insect is Horse-hair animated. Mr. Lister found some of them in the Belly of a large black Beetle, and makes several Remarks upon them. It has been said that Horse-hairs laid in standing Water in the warm Sun will become Eels; if there be any such like Appearance, it may proceed from those Hair-Worms, whose Seed has been before in the Water. It is now the
establish'd

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establiſh'd Opinion that there is no ſpontaneous Generation, but that all Animals proceed from their kind. For theſe I have quoted Dr. *Grew's* Hiſtory of the Royal Society, and ſhall uſe the ſame in proper Places.

The oppoſite Part of the Globe to *England* is in *Terrâ incognitâ*, or in the unknown Ocean, within the *American* Hemisphere, between 50 and 56 Deg. S. Lat. with 200 and 210 Lon. This is called the *Antipodes*, the Soles of the Feet being oppoſite, and Mens Heads pointing contrary ways, but all round the Globe erected towards Heaven; becauſe all Bodies tend to the Center, and all from the Center are upwards; the Body ſtands upright towards Heaven, and thither in like manner we ſhould direct our Minds, as Nature ſeems to intimate to us. *This is the wonderful Work of the Creator, who by Wiſdom hath founded the Earth.* Prov. 3. 19.

Scotland. Edinburgh, the chief City, Lat. 56. 10 Min. There is an Arm of the Sea called the *Forth*, wherein is the *Island Baſs*, which is all a great Rock, very high, where *Solan* Geefe breed, and perhaps have their Name from their ſolitary Haunts; but there is another Reaſon given, *viz.* That they lay but one Egg, and that but once a Year. There is not good Authority for the hatching their Egg with the Sole of their Foot, and I doubt of that which is ſaid, that the Egg is ſo placed, that if it be removed, no Man can make it lie there again. They are like tame Geefe, but
the

the Bill longer; and they have this strange Property that they swallow several Fishes, and disgorge them again, and at last the Female brings one to her young One. The *Bass* is a Mile round. *Atlas.*

Near *Edinburgh* there is a Spring called the *Oily-Well*, the Surface of whose Water is covered with a kind of Oil or Bitumen, which cures Pains caused by Cold; and there is another called the *Routing-Well*, because it usually makes a Noise before a Storm. High up in the Country there is the famous *Lough-Neefs*, which never freezeth but retaineth a Warmth in the extremest Cold of Winter; and in many Places no Bottom is found by a Line of 500 Fathoms. Nigh hereunto is a Mountain of two Miles height in the Ascent, which hath a Lake on its Top that never freezes; it is always full, and no Bottom to be found. *Atlas.*

Inverness, Lat. 58. It is a Town and Port of great Trade, tho' so far North, much improved of late by the Invention of General *Wade*, who devised and directed the making of a Road cross the Country, between this Place on the East side, and Fort *William* on the West, built by King *William* of glorious Memory, upon a Harbour looking towards *Ireland*. This Road is cut partly through Mountains, great Hills are levell'd, deep Vales filled up, Bridges new built; so that loaden Carriages may pass well, where before it was scarce passable to a single Man on Foot.

F The

The General employed his Soldiers herein, and imitated the *old Romans*.

Here Nature makes the worst Figure, but this in order to the best Use, by the Wisdom of divine Providence ; not that Man may mend God's Work, but God hath set out Work for Man, as it is more or less all the World over, that Mankind may have a proper Exercise. The Creator hath found Materials, and left *Room* for Man's Employment, that he may be well employed. Nature hereby intimates to Mankind that they should follow innocent Business, and keep themselves from vicious Courses ; that they should work for their own Advantage, and avoid the Ruin of Excess. *In all Labour there is Profit.* Prov. 14. 23.

“ The new *Roads* in the Highlands of *Scotland* are an extraordinary Instance how far “ *Art* may render useful the most massive and “ irregular Productions of Nature.” The Highlands are more than one half of *Scotland*, and are composed of Mountains rising one above another, as it were in Progression towards the Inland, and Western part of the Country ; which Mountains extend from *Dunbarton*, near the Mouth of *Clyde*, to the North part of the Island of *Great-Britain*, above two hundred Miles in length, and from East to West, they are from fifty to above an hundred Miles in breadth. There are little Valleys between, which are divided from one another by barren and rugged Hills, mostly composed of Rocks, Bogs and Precipices.

Hence

Hence the *Roads* were so difficult and dangerous that the Highlands were little known to the Inhabitants of the low Country, who dreaded more to travel in those Parts than to take a long and hazardous Sea-Voyage. And the Highlanders were much hindered from Commerce and Acquaintance with the more civilized part of the Country, and were likely to continue for ever attach'd to their ancient barbarous Customs and Manners, unless some Expedient were found to introduce *Trade* and Industry among them, and thereby render them happy in themselves and useful to Society.

To this end, in the Year 1724, General *Wade*, by Commission from his late Majesty, proceeded to the Highlands, in order to inform himself of the State of that Country, and to propose a Remedy of some Irregularities at that time complained of; and travelled over the most difficult and dangerous Passages of the Mountains. In this Progress he projected the bold Undertaking of making smooth and spacious Roads in that Heap of Confusion; concerning which, a Person of Skill, who saw the Performance of some of the difficult Parts, said, he was struck with greater Surprise at the mention of the *Project*, than afterwards, when he saw it put in Execution.

In the Year 1726 the General began the Work; and surmounting almost incredible Difficulties, compleated the same in the Year 1737; in which no more than 500 of the Soldiers quartered in *Scotland* were employed

during the Summer Season, by Detachments from the Regiments and Highland Companies, under proper Officers chosen for that purpose; whereby the Expence of the Work was reduced to one fourth part of what it would have been in the ordinary Way. These *Roads* are all fit for Wheel-Carriage or a Train of Artillery, being about 250 Miles in length, and from twenty to twenty-four Feet in breadth, including the Aquæducts and Side-drains that preserve them from the Injuries of violent Rains, which are frequent among the Mountains.

They are every where carried on in direct Lines as far as the Hills would permit, as well for the Beauty of the Work as to shorten the Way, notwithstanding the Opposition of Woods, Rocks and Bogs, which often interposed to prevent that Regularity. The huge massive Stones that have been raised out of the Ground by the Force of Engines, are set up in Lines by the sides of the Roads, and serve as Guides in time of deep Snows, as well as Monuments of the former Roughness of the Ways; and at the distance of every five measured Miles are Pillars, which inform the Traveller how far he has proceeded on his Journey.

The Roads are made to enter the Mountains at two different parts of the low Country, viz. one at *Crief*, which is fourteen Miles North of *Sterling*, where the *Romans* left off their Works, which are yet visible as far as the *Roman* Camp of *Ardock*, in the Way between
Crief

Grief and *Sterling*; and the other Road begins at *Dunkeld* ten Miles North of *Perth*. The first, which is eighty-five Miles in length, (and leads to Fort *Augustus*, a new Fortification at the West-end of *Lockness*) proceeds through *Glenalmond*, where the Hollow is so narrow, and the Mountains on each side so high, that the Sun is seen but two or three Hours in the longest Day.

In this Vale was discovered a *Roman* Urn, by the Removal of a Rock of 1500 Tun, that stood within the Lines by which the new Road was markt out; and in the Urn were found some Ashes, scraps of Bones, and burnt Stalks of the Heather or Heath wherewith the Body was consumed. From *Glenalmond* the Road continues to *Abberfaldy*, at which Place it crosses the River *Tay* by a Bridge to be hereafter mentioned, and goes on to *Dalnachdack*. There it falls in with the Road which enters the Hills at *Dunkeld*, and thence proceeds over the Hills of *Drummochter* to *Dalwhiney*, where it branches out in two, viz. one to the North-West through *Garva Moor* and over the *Coriarack* Mountain to Fort *Augustus*, and the other due North to the Barracks of *Ruthven* and *Inverness*.

Fort *Augustus* stands at the most central Point of the Highlands, half way between Fort *William* on the West Coast and Fort *George* a new Fortification at *Inverness* on the East Coast; and the Road passes by the sides of the Lakes *Ness*, *Oick* and *Lochy*, which divide the

Northern from the Southern Highlands in such manner, that the Space of Land that is passable between those Lakes, from North to South, does not exceed six Miles in the whole. This Road from *Inverness* to Fort *William* is sixty measured Miles in length; a great part of it cut through solid Rock with great Labour; but is now the most beautiful Road in the Kingdom, and promotes a Trade from *Ireland* to the East and North of *Scotland*.

It would be endless to enumerate the various Difficulties that occur'd in the making of these Roads; I shall therefore confine myself to some few Particulars: First, There is a steep and high Precipice on the side of *Lock-Oick*, being a Rock projecting over the Lake, where it was both difficult and dangerous to pass on Foot for near three Miles of length, and in some Places the Passenger was obliged to creep on his Hands and Knees, especially at the part called *Maiden's Leap*, than which Precipice nothing of the kind could be more terrifying.

2dly, The black Rock on the Side of *Lockness*, where the Miners were obliged to hang by Ropes whilst they bored the Rocks in order for their Blasts of Gunpowder. This Lake is in it self a Curiosity, being a beautiful natural Canal of twenty-one Miles in length, with the Rocks and Mountains rising from the Water's Edge. It lies in a direct Line from one end to the other, above a Mile in breadth, 130 Fathom deep, and never was known to freeze in the severest Winter. For the space of twelve Miles

Miles along the side of this Lake the Road forms an agreeable Terrass in every part, from whence the Lake is seen to either end; and along the three Lakes, *Ness*, *Oick* and *Locky*, in several Places, the Road is secured from the Precipices by Walls of two or three Foot high, according as the Work required it.

3dly, The *Laterfinlay* Road runs along the side of *Lock-Lochy* for the space of nine Miles, which is the length of that Lake, on Rocks that in many Places project over the Water; and was made with great Labour and Force of Gunpowder.

4thly, *Slock Moick*, between *Ruthven* and *Inverness*, was a steep Descent by hideous Rocks almost impassable; and beneath ran a small but dangerous Bourn, filled with large Pieces of Rocks, brought down by violent Floods from the Mountains.

5thly, The Pass of *Killicranchy*, between *Dunkeld* and the *Blair* of *Athol*, very difficult even for the foot Traveller. *Dunkeld* is the ancient *Caledonia*; *Athol* is the North Division, forty-three Miles in length, and hath Valleys full of Trees, but one part is called the *Blair*, that is a Place without Trees.

6thly, The Road over the *Coriarack* Mountain, which is above a quarter of a Mile in perpendicular height, is carried on upon the South Declivity by seventeen Traverses or Windings, each of about seventy or eighty Yards in length, as the Hill would admit; and

all supported, on the lower side and at the turnings, with Stone Walls of ten and fifteen Feet high; by which Means the Ascent is made more easy for any Wheel-Carriage than that of *Highgate*. The Pass of *Snugburgh* on the North Side of this Mountain is a deep Bottom between two steep Hills exceeding high, joined by two dry Arches and a Wall of Supportment; and all these Parts of the Roads, which were look'd upon as Difficulties not to be overcome, are now as safe and commodious as any other Part of the Roads.

There are forty Stone Bridges built upon these Roads, the most considerable are these, 1. The Bridges of *Gary* and *Tumble* are single Arches, upwards of fifty Feet diameter over rapid Rivers, which in Time of Floods bring down Stones of a monstrous Size. 2. The Bridges of *Feicklaw* and *Ferrigig* are built over a great Torrent that forms the famous Cascade of *Fyers*, within a Quarter of a Mile of *Lockness*; they are both raised on single Arches, each upward of forty Feet diameter. 3. *St. George's* Bridge at *Garva-Moor* over the River *Spey*, which gives name to the Strait thro' which it runs; this has two Arches of forty Feet each; the Pier rests upon an Island in the Middle of the River, and the whole Bridge is about one hundred and fifty Feet in length.

4thly, *High-Bridge*, over the River *Spayer*, six Miles East of *Fort-William*. The River runs at the Feet of two very steep Hills over fur-

surprizing Rocks, where at the lowest Water it is eighteen Feet deep, and in Floods rises to near fifty Feet: It has three Arches, the middlemost of fifty Feet diameter founded upon Rocks; it is seventy Feet from the Top of the Bridge to the usual Level of the River; the other two Arches are thirty Feet each upon dry Ground at low Water. The Road descends a great Way down in Traverses from each Side of the River, and the Bridge is two hundred Feet in length over a Chasm, which is frightful for Travellers to behold.

5thly, *Tay-Bridge*, which is the only Bridge on the River *Tay*: This is built of Free-stone, and the Work extremely well executed; it consists of five Arches, the middle Arch is sixty Feet diameter; the Piers are founded upon Piles, and bound with strong Frames of Oak. The length of the Bridge is three hundred and seventy Feet; and in the Opinion of good Judges it is a most beautiful as well as useful Structure. It hath this Inscription, viz.

Mirare

The Wonders of Nature

Mirare

Viam hanc Militarem

Ultra Romanos Terminos

M. Passuum CCL hac illac extensam

Tesquis et Paludibus insultantem

Per Rupes Montesq; patefactam

Et indignanti Tavo

Ut cernis instratam :

Opus hoc arduum suâ solertiâ

Et decennali Militum Operâ,

Anno Ær X^a 1733 perfecit *G. Wade*

Copiarum in Scotia Præfectus.

Ecce quantum valeant

Regia Georgij 2^{di} Auspicia !

Now it is a Pleasure to see what before was unpleasant, and without the Sight there is Satisfaction in the Publick Benefit: The Ease and Convenience of these Roads has induced several of the Highland Gentlemen to make good Ways at their own Expence from their Habitations to the main Road : And where there were none but Hutts of Turf for an hundred Miles together, there are now, at ten or twelve Miles Distance from each other, Houses built of Stone and Lime for the Accommodation of Travellers. These Roads have made Way for better Government : It is now become familiar to the Highlanders to see their Judges pass in their Circuits thro' those Countries where, by Reason of their Numbers and Aversion to the Restraint of Laws, no Officer of Justice would venture to appear,

appear, if not supported by Force. The *English* Drovers, who used to attend the Fairs of Cattle on the Borders of the Highlands, go into the Heart of the Country to make their Markets; and the Inhabitants have learned from the Soldiers who were Husbandmen a better manner of tilling their Ground, and from others to improve in several handy-craft Trades: In fine, the Mineral Treasures, in which the Highlands abound, will be brought to Use, and many other Advantages will accrue from these Roads to the Highlanders themselves and the Kingdom in general.

Glasgow, Lat. 56, 20. It is a neat Town, and hath a good Trade, situate on the West Side almost overagainst *Edinburgh*; its principal Streets have Piazza's all along under which the People walk, and visit the Shops within them. At *Pasley* about five Miles from *Glasgow*, in the Lands of *New-Yards*, there is a Fountain on high Ground, which ebbs and flows with the Tide of [the River, tho' at a good Distance from it. Near *Renfrew* there is a Spring which ebbs and flows with the Sea. These Tides happen according to the subterraneous Passages, which are more open to receive them. *Atlas*.

Lough-Loman is famous for its floating Island, for Fish without Fins, and for being frequently tempestuous in calm Weather; thereabout is the *Martin*, a kind of Hawk of small Size; it hath very tender Feet, which cannot endure cold; wherefore Nature hath provided that it hunts a Bird in the Evening, sits upon it all Night

Night to keep its Feet warm, lets it go in the Morning without Hurt, and hunts another Bird to prey upon. In *Sutherland* no Rats will live, tho' they swarm in *Caithness* the next Shire. *Loch-Tay* and *Lochern* never freeze, but smoke and dissolve Ice thrown into them during the greatest Frosts, which is ascribed to the sulphurous Ground they run thro'. *Atlas.*

There are Fountains found on the Tops of the highest Hills, as on the highest of the *Lowmond* Hills: There is a Spring of fresh Water on the Top of the *Bass* Island, altho' it is all a Rock of a great Height, and cannot receive or keep Rain to maintain a constant Fountain. On the high Rock of *Dunbarton* Castle there are two Fountains about three Feet from one another; one of which running South is very salt, the other running North is fresh and clear. These and such like in other Places are plain Evidences that tho' Springs are increased by Rain in Vales, yet their main Supply is from the Sea.

In *Glen-Elg*, which lies over-against the Isle of *Skie*, there is a Stream which turns *Holley* into greenish Stone, of which they make Moulds for Bullets, and Pots to melt Brasses or other Metals in. *Spey* is the most rapid River in *Scotland*, of which it is observed that it swells by a West Wind in the Heat of Summer, tho' there be no Rain; it is in the North Part, and falls into the Sea at *Germack*. This is another Evidence that Springs proceed from the Sea, and this I take to be the Reason that
the

the several Fountains of this River being near the Sea, and the Passages more open thro' the Earth, the high Tides in Summer bring a larger and a constant Supply to them.

In the Western Islands there is abundance of *Solan* Geese. Mr. *Martin*, who wrote an Account of the Isles in 1703, says that the *Solan* Geese come in *March* with a South-West Wind; and before the great Flock comes, some arrive as Harbingers, which after flying round the Isles go again to their Company, and in a few Days come back with them; they stay till *September*, and build in the high Rocks. The Steward of *St. Kilda* told him that he found in some of their Nests a red Coat, a Brass Sundial, Arrows and *Molucca* Beans; whence it is probable that these Birds leave *Scotland* against Winter, and go to the *Molucca* Islands for warmer Habitations: These Beans are often found upon the Coast, together with another sort of a black Colour; which the Natives powder and drink in Milk boiled for the *Diarrhæa*. *Atlas.*

The *Solan* Geese sleep with their Head under their Wings, and one of them always keeps watch, which being surprized by the Fowler, the rest are easily taken by the Neck one after another. In those Islands these Birds are so numerous that the Inhabitants keep above twenty thousand in little Houses made for the Purpose. It is very remarkable that this Bird, the *Penguin*, &c. which build upon Rocks, lay but one Egg at once, because they are seldom destroy'd;

destroy'd; and if they were greater Breeders, there would not be Room enough for the hundredth Part of them; whereas inland Fowls, especially the Domestick, lay many for one sitting, because continually taken for Use. Dr. *Grew* and *New Atlas*, p. 257.

Mr. *Martin* saith that a few Years before he wrote, about one hundred and sixty young Whales, the biggest about twenty Feet long, came a-shore in *Tereiy*, one of the Western Islands, in a Time of Scarcity, and were eat by the Inhabitants who found them wholesome and nourishing. I suppose this was the Time when *Scotchmen* came to *Newcastle* to buy Beans, which they fed much upon in the South Parts, eight hundred Horse-Load per Week were carried for several Weeks. This was about forty Years ago, when there was no want in *England*. Near *Swinna*, one of the *Orcades*, are two dreadful Whirlpools in the Sea, and another between *Ila* and *Jura*, during the first three Hours of the Flood they are very terrible, and probably occasioned by some subterranean *Hiatus*.

In *Kirkwall*, one of the *Orkneys*, there are *Claik Geese* or *Barnacles*, which, it has been said, hang upon Trees, and come to Life as if bred there: But they lay their Eggs, as some Fish do, in the Water, and leave them to the Mercy of the Waves; as they float they stick to what they meet with, Pieces of Wood or Sea Weeds; for on these is found a glutinous Substance, of which they are hatched by the
Sun's

Sun's Heat : But Mr. Ray is of Opinion that these are the same with Barnacle Shells, which are found upon the Back of Tortoises, and increase in Bigness as other Shells do, but do not come to Life. *Atlas, Ray in Harris, p. 571.*

Kilda Island. Here is a Bird called *Fulmar*, of the Size of a Moor Hen, but it hath a strong Bill and wide Nostrils, which have a peculiar Use, and are formed for the Purpose ; it is supposed to pick its Food out of live Whales, because such Stuff is found in its Nest, and it is very remarkable that the Oil is made in the Creature : For when it is approached by any Man, it spouts out at its Bill a great deal of pure Oil in its own Defence ; and therefore the Natives surprize the Bird by Gins, receive the Oil into a Vessel and use it in their Lamps : They also use it with Success against Rheumatick Pains, Tumours, and for Purging and Vomiting. *Atlas.*

Burray Isle. The Inhabitants say that no Mice will live in it, and that wheresoever some of that Earth is brought they will forsake the Place. At *Hoy*, one of the *Orkneys*, one may read a Letter in his Chamber by Day-light at Twelve o'Clock at Night, there being long Twilight. Lat. 63.

Sky Island. Here the Cattle feed in Winter on the Sea Weed, and observe the Ebb very exactly for that End : Here are several Bays which abound with Herrings, which the Natives dry and preserve eight Months without Salt. *Barra* hath a high green Hill, from which

which a Fountain flows, whose Stream carries down a sort of Cockles in *Embryo*; and great Quantities of Cockles are found in the neighbouring Sands. *Atlas.*

Ireland. There is a Bird call'd *Puffin* by the Natives, by others the *Bottle-Nose*, less than a tame Duck, his Bill like that of a *Penguin*, which shall be mentioned hereafter, saving that the Horn of the nether Beak is not shortened as in the *Penguin*; when they fight they hold so hard by their Bill as sometimes to break one another's Necks before they will part; whatsoever they eat in the Day, they disgorge a good Part of it in the Night into the Mouths of their Pullen; they lay their Eggs under Ground: they breed also in the Isles of *Fero*, *Iceland*, *Syllies*, and in *Mona* belonging to *Denmark*. *Dr. Grew.*

Colerain. About eight Miles from this Place is that Wonder called the *Giants Causey*, which runs from the Bottom of a high Hill into the Sea, none can tell how far; it's Length at low Water is six hundred Feet, Part of it two hundred and forty Feet broad, Part one hundred and twenty, unequal in height; it consists of many thousands of Pillars, all of different Shapes and Sizes, but most of pentagonal or hexagonal, perpendicular to the Plain of the Horizon, yet all irregularly placed: There is a Draught of it with an Essay, proving the same to be rather a Work of Nature than of Art. *Philos. Transf. Numb. 212. Atlas.*

In the Province of *Ulster* is the famous *Lough Neagh*, noted for its petrifying Quality, which is not in the Water it self, but communicated to it from the Soil of the Ground adjacent and under it. In several Parts are digged up Deers Horns of a prodigious Size: A Pair was lately found ten Feet and ten Inches from the one Point to the other; which gives some Occasion to apprehend, that the great *American* Deer, called the *Moose*, was formerly common in this Island. *Ireland* has this wonderful Quality that it nourisheth no venomous Creatures, and *Irish* Wood kills them; it is said they die by the Touch of a Native, and that any Wood stroaked by a Native doth the same: But of this I want to be further satisfied. *Dublin*, Lat. 53, 30.

However, there is so much certain Truth as is a great Wonder in Nature, and a great Work of Providence, which makes such a Difference in Places. Now it may be ask'd, Why hath God created any venomous Creatures that are mischevous to Mankind, and what is the Use of them? There are some of them useful in Medicines, and some heal the Wounds they have made: There may yet be more Uses found; and it is an Employment of Mankind to make Experiments. It is a Work of Providence that assists Mens Enquiry, when Uses are found out by Accident, and some Good is found where least expected.

There are divers Medicines made out of Vipers, and from them *Venice Treakle* is made.

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Among

Among the Rarities of the Royal Society there is the Slough or Skin of an *English Viper*, as it was naturally cast off; they cast them twice a Year, *viz.* at the Spring and Fall; the Separation begins at the Head and is finished in twenty-four Hours; and from all Parts so entire that the very outward Skin of the Eye is plainly to be seen; they receive new Strength with a new Skin. Sir *Thomas Brown* saith, from the Experience of credible Persons, that the Viper, in case of Fear, receiveth her young ones into her Mouth, and when the Fear is over they return thence again. *Dr. Grew.*

But the principal End and Use of venemous Creatures, and all others hurtful to Mankind, is to be a Medicine for the Mind. From hence they may be made sensible that they are Offenders against God, because their Bodies are liable to great Pains, placed amongst many Dangers; and some Creatures are not subject to them. But there is also a Work of Providence in that we suffer not more by wild Beasts. Nature also suggests to us to be careful on all Occasions; and that as our Care is necessary to preserve the Body from Harm in this Life, so more especially the Soul is to be taken Care of, lest it fall into greater Evils in a future State.

Iceland lies North from the *Orcades*, Lat. 67. There is a Lake that always smokes, and yet is so cold that it petrifies every thing that comes into it. *Bleskenius* saw an Experiment try'd upon a Piece of Wood, which being stuck into this Lake, that Part of it which was under

der Ground, turn'd to Iron; so much of it as was cover'd with Water turn'd to Stone, and the Part above Water continued Wood. The petrifying Water in *Ireland* only changes that Part which lies in the Mud into a darker Colour. On the contrary, although *Iceland* is in a very cold Climate, yet it hath several hot and scalding Fountains. *Harris, Atlas.*

The Mountain *Hecla* is always cover'd with Snow; yet it is a terrible *Vulcano*, like *Ætna* in *Sicily*, and *Vesuvius* in *Italy*. It frequently vomits Fire and sulphureous Matter in great Abundance; and sometimes in such a terrible Manner, that the loudest Claps of Thunder are hardly so formidable. The natural Cause is the great Quantity of Veins of Sulphur and Nitre, of which some Particles being drawn together, take fire of themselves, as it is known by Experiments such Matter will do; and those Particles are drawn together, by Force of Air or Wind passing through the Caverns or Cracks of the Mountains; as the Hole near *Nions* in *Dauphiny* sends forth a strong Wind. *Atlas.*

France, Picardy. Near *Amiens* is a Mountain, in which are found Oysters petrified. These have laid some Time in a Spring of a petrifying Quality, without changing their Figures. These and other Sea Shells, being found upon Hills and also in low Grounds far from the Sea, prove the universal Deluge. Heaps of Shells are found upon the Top of the *Alpes*. In the Middle of *Africa* there are Plains full of Shells three hundred Leagues

from the Sea; and the same in *Asia*, upon the Mountains of *Persia*, Parts of *Taurus* and *Caucasus*. *Crecy* or *Cressy* is famous for a great Victory by our *Edward III.* when Cannons were first seen in *France*, of which the *English* having six Pieces, it much contributed to the Victory. Anno 1346. *Atlas, Harris.*

Languedoc is famous for the Canal made by *Lewis XIV.* between *Garone* in the West Coast and the Gulf of *Lyons*; which opens a Communication betwixt the Ocean and the *Mediterranean-Sea*. It begins at *Blagnac*, is ninety-two Miles in a direct Line, besides Windings; the Whole sixty-three Leagues. Goods are conveyed in fifteen Days from the Bay of *Biscay* to *Marseilles* by the River *Garone* and this Canal. There are large Basins, to keep in or let out at Pleasure, and to receive Rivulets. The chief Basin is that of *Ferreal*, about two thousand Fathoms round and ninety Feet deep. The Basin of *Raurouse*, two hundred Fathom long and one hundred and fifty broad, receives the Waters from the *black Mountain*, and lies in the highest Place of the Canal, so the Water can be let out on both Sides, and runs contrary-ways. *Atlas, p. 144. Lions, Lat. 45, 30 m.*

Poictiers. Most of the Vipers, of which *Venice-Treacle* is made, are sent from this Country; and here they make of them the *Trochusque* so much esteemed. A Mile from hence there is a Stone erected, twenty-five Feet high, seventeen broad, sixty round about. It

is

is called the *Pierre Levée*; they do not say upon what Occasion it was set up; but it has this Distich upon it.

*Hic Lapis ingentem superat gravitate Colossum
Ponderis, et grandi Sydera mole petit.*

Clermont has a Colossus of *Mercury* four hundred Foot high, and several other *Roman* Monuments. Within three Leagues of *Eureux*, the River *Ityn* runs three Miles under Ground, and breaks out again with a great Noise. *Atlas*.

Angoulence, fifty-five Miles South-West from *Poitiers*. There is a River here called *Perusa*, which, about seventy Miles from the Sea, flows in *April*, *May* and *June* every Year and dries up afterwards. The People have Notice of its flowing a little before, by the filling up of a certain Well. In the Cathedral here are kept the Bones of a Giant called *Briat*, who was fifteen Cubits high. This Place is famous for a Council of *French* Prelates 1438, wherein they asserted the Privileges of the *Gallican* Church, in a Constitution of twenty-three Articles, afterwards approved by Pope *Eugenius IV.* *Atlas*.

Brittany. There is a Bird like a Sea-Duck, which is said to breed in Planks of Ships. They seem to grow out like a Crust, with their Beaks towards the Water, much like the *Scotch* Barnacles. *vid. Scotland*. There is a Lake near *la Besse*, which is so deep it could never be founded; and when a Stone is cast into it, it is said to raise Storms of Hail, Lightning and

Thunder; and in a hollow Place near it, a Noise is heard in Summer like Thunder. *Auvergne*: There is a Spring that freezes in the hottest Weather, and is hot in Winter. Near *Issoire* is a Lake, into which if a Stone is cast, it raises Vapours which dissolve into Rain. *Atlas. Paris Lat. 48, 20.*

At Mount *Firand* there is a clear Fountain, whose Waters turn into Pitch and Bitumen in Summer, of which a Hill is formed, called the *Mountain of Pitch*. *Liburn*, fourteen Miles above *Bourdeaux*. Here is an irregular Tide, which rises in the River all on a sudden, when the Water is most calm; it runs a great way up, and overturns all the Boats in its Way. *Rockel* being besieged by *Charles IX*, and press'd with Famine, Shoales of Fish, never seen there before came into the Harbour, to the great Relief of the Inhabitants; and as soon as the Siege was raised, they went off and never were seen more. *Atlas.*

Burgundy, Sens. Chatri Columbe, a Taylor's Wife, is mention'd in History for a very surprising Accident that happen'd to her. About twenty Years after she was married, she had all the Signs of being with Child, and about the Time felt the usual Pains of Child-bearing, but could by no Means be deliver'd. She kept her Bed three Years, at the End of which her Pains ceased; but her Belly still remain'd big to her Death, which happened about twenty-four Years after. Being open'd, a Girl was found quite form'd and petrified. She

She lived in the Time of *Henry III.* of *England.* *Atlas, Collier.*

Cambray. Dr. *Norleigh* says, he met with a *Frenchman* here, who, after fifteen Years Labour, had made an Artificial Head, that by Springs and Clock-work uttered whole Dialogues with human Voice, laugh'd and expressed some other Affections. *Angers:* Here is an annual Proceſſion, to expiate the ſuppoſed Crime of the Arch-deacon *Berengarius*, who opposed Transubſtantiation, when it was firſt broach'd, *Anno Dom.* 1019. Lat. 47, 27. Lon. 17, 48. Near the Monastery of *Morat*, there is a Field out of which iſſue frequently Flames of Fire. At *Valence* there is a Picture of *Bruard* a Giant, whoſe Bones were dug up here; by which it appears he was fifteen Cubits high. *Atlas.*

Holland. At *Leiden*, among the Rarities, there is the Body of a *Remora*, a Fiſh that is ſaid to ſtop a Ship; which ſhall be obſerved in a proper Place; but here I ſhall ſet down what Dr. *Grew* ſays, viz. That the Tradition had a very early Beginning, when little light Boats were the Ships then uſed, to the Side whereof this Fiſh faſtening it ſelf, might eaſily make it ſwag, as the leaſt Preponderance on either Side will do, and ſo retard its Courſe; and the Story, begot upon a Boat, might ſtill, like the Fiſh itſelf, ſtick to it, though turn'd into a Ship; the People aſſigning as great a Power to *Neptune* in the Sea, as the Poets have done to *Apollo* the God of Life in the Heavens,

who yet appears, by the best Accounts of him put together, to have been at first no better than a crafty Mountebank. Dr. Grew, p. 106.

Maßricht. Near it is a Quarry, to which People retire with their best Effects, when Armies march that way. There is Room for above forty thousand People; the Roof is supported with a thousand square Pillars, which have been made by the Quarriers, when they dug out the Stone. In *Zealand*, Anno 1323, there was a Woman of such a Bulk, that the tallest Men look'd like Children to her. She was so strong, that she would easily lift up with each Hand a Barrel of *Hamburg* Beer; and would carry as much Weight as eight strong Men. *Atlas. Hague*, Lat. 52, 20. *Amsterdam* is a beautiful City. Lat. 52, 40.

Here great Numbers of *Storks* have their Nests upon Chimneys and other Parts of Houses. They destroy the Vermin which is apt to breed in those low Lands, and therefore none are allowed to molest them. At *Delft*, most of it being burnt Anno 1536, the old *Storks*, that built in the Chimneys, chose rather to be burnt than leave their Young. The Proceedings of the *Storks* are a Wonder in Nature. They are a Species of Season-Birds, which at certain Times change their Habitations, and go into other Countries, either for a colder or warmer Climate, for Change of Food, or more plentiful Feeding.

When the *Storks* have bred and their Young fully fledg'd, the Time of their Departure
drawing

drawing nigh, they all to a Bird assemble about *Haerlem-Meer*; the First-comers wait for the rest. They stay some Days chattering and making a great Noise; in the Midst of this Noise there is a sudden Silence, and upon a Signal given they all rise together. They fly in one great Flock, fetch many great Rounds over the Place of Meeting, still rising higher and higher, resembling a great Cloud, which appears less and less till it quite disappears. Wheresoever they rest, one is set to watch whilst the others sleep. It is hard to determine where these and other Season-Birds take up their Quarters.

A certain Author saith there is no Place to be assigned for them but the World in the Moon, because there is no Discovery made below, and they fly directly upward. The Woodcocks drop suddenly down, and are said to appear at the same time in all Countries. I suppose their high Flight is more convenient; for after they are once mounted up, their Passage is more easy by a Descent, and they are better supported by the Air, which yet is too weak beyond our Atmosphere, either to bear them up higher or to forward their Motion. The vast Woods of *Poland*, *Muscovy*, *Tartary* and *Perfia*, may afford a secret Recess to the Storks. The Woodcocks probably come from *Norway* to warmer Climates against Winter, and always take the East Wind to forward their Journey.

Among

Among the Remains of the once famous City *Persepolis* in *Persia*, which *Alexander* burnt to please a Harlot, there are the Ruins of a spacious Building, and nineteen Pillars yet standing, where Storks build their Nests, and are never disturbed, because the People have them in Veneration. *Harris, St. Thomas Herbert.* There is an Island near the Mouth of the *Elbe*, where it has been observed that Woodcocks meet in such vast Numbers, as almost to cover the Island, and after a little resting there they take their Flight Westward. These and others change Places, as moved by a wonderful Instinct, for some agreeable Conveniency. But, I suppose, it is too long a Journey to the Moon, which is distant fifty-two Semidiameters of the Earth, that is, 179712 Miles from this Globe.

It is clear, says Mr. *Ray*, that Quails fly out of *Italy* into *Africk*, and sometimes drop down upon Ships. He makes this good Remark, That these and other Birds should venture so far, and find their way to a certain Place, being very timorous Creatures, is unaccountable any other way but that they are directed and acted by a superior and intelligent Cause. But if there is no certain Knowledge of other Migrations, there is one thing very certain, a most useful Providence, to point to us our great Concern: These Birds are appointed to instruct Men, and upbraid those that mind not their Seasons, to look up to Heaven and adore their Maker. *The Stork in*
the

the Heaven knows her appointed Time, and the Turtle and the Crane and Swallow observe the Time of their coming; but my People know not the Judgment of the Lord. Jer. 8. 7.

In *India* there are Storks of a larger kind; their Bills are above a Foot long, and more than three Inches high; the Edges rough like a Saw, with numerous Incisions directed backward, as in divers other rapacious Birds, designed on purpose in all of them for the more secure Retention of their Prey. Mr. *Willughby* saith of the Storks, That they devour Snakes and other Serpents whole, and they will quickly slide through them; but when they begin to creep out of their Breeches, the Storks presently clap them close to a Wall to keep them in. Dr. *Grew*.

Haerlem. Here they challenge the Invention of Printing, which was begun by *Lawrence Cester*. *John Guttenbergh* of *Strasburgh*, and *Conrad* and *Arnold*, Brothers of *Mayence*, challenge that Honour. But the *Dutch* say that *Cester's* Servant robb'd him of his Instruments, and carried them to *Mayence*; whence this City contends with *Haerlem*. This most excellent Invention was found by Accident; he cut some Letters upon a piece of Bark, and laid them inverted upon a piece of Paper. His Statue is to be seen in this Place, with an Inscription in Golden Letters. It seems to be a Work of Providence, as it is acknowledged by the Inscription, *An. 1440*.

Extulit

The Wonders of Nature

*Extulit hic monstrante Deo Laurentius Artem,
Dissimulare Virum dissimulare Deum est.*

Mr. Meyer assures us, That in 1403 a Mermaid was cast ashore near *Haerlem*, who was brought to feed upon Bread and Milk, taught to spin, and lived many Years. *John Gerard of Leiden* adds, that she would frequently pull off her Clothes and run towards the Water; and that she imitated Speech, but it was so confused a Noise as not to be understood by any body; she was buried in the Church-yard because she had learnt to make the Sign of the Cross. He speaks this upon the Credit of several Persons that had seen her. *Harris's Collection.*

Losdun, a small Village, but famous for an extraordinary Birth, and two Basons kept in its Church in Memory of it. The Countess of *Henneberg* reproved a Beggar-Woman who had three Children at a Birth, and said she had been dishonest. The grieved Woman wish'd that she might have as many Children at a Birth as there were Days in a Year, which accordingly came to pass, and they were no bigger than Mice. They were baptized in those two Basons, and buried in the said Church. The whole History is painted at large, and the Basons fixed on each Side. This Memorial, with other good Authorities, testifies the Truth of this Story, and the Work of Providence; which sometimes acts extraordinary Things, for an Evidence of a supreme Power. *Bleau, Atlas, p. 120.*

Flanders.

Flanders. Antwerp, Lat. 51. 25. The Cathedral Church-Steeple is so finely carved that *Charles V.* said it should be put in a Case and only shewed on Holidays. The Ground between *Antwerp* and *Ghent* yields 40 or 50 s. per Acre yearly. After a Crop of Flax they sow Turnips which yield as much Profit as good Corn. In *April* following they sow the same Ground with Oats and Rye, and upon the Oats Clover-seed, which, after the Oats are mowed, grows up and affords rich Pasture till *Christmas*; next Year it produces three plentiful Crops of Meadow, and continues four or five Years without renewing.

Ghent. There are upon the Bridge there, over the *Lys*, two Brass Statues, representing a Man ready to cut off the Head of another; the Father and the Son, who being both condemn'd to die, the Emperor offered a Pardon to either of them that would be the other's Executioner: A cruel Mercy! After a long Contest the Father prevailed upon the Son to save his own Life by taking away his, which the Son being forced to consent to, as he lift up his Hand to give the Blow, the Blade either broke in the Air or flew out of the Handle; which being interpreted as a most singular Piece of Providence, they were both pardoned.

Bruges. Boetius, a native of this Place, gives an Account of subterraneous Woods, which have been digged up ten or twelve Ells deep in the Earth, with the Trunks, Boughs and Leaves so apparent that several kinds of them

them may be easily distinguished. The like are found in *Friesland* and about *Groningen*. Mr. Ray saith, It is very probable that, before all Records, Woods in low Grounds have been overwhelmed by the Sea, and continued some time under Water, till Floods brought down so much Earth as covered them by degrees. Much of the low Countries have been overflowed, and regained after this manner; and the same has happen'd in some Parts of *England*.

Germany. *Pomerania* is the North Part upon the *Baltick-Sea*. Hereabout is Plenty of Amber, which is not only found in the Water, and among the Sand and Sea-weeds, but also dug out of the Rocks and Mines at a great Distance from the Sea. Mr. *Hartman's* Account is strange: He found many Pieces of Amber, having naturally formed in them Figures of Shrubs, Leaves, Animals, *Arabick*, *Hebrew* and *Latin* Letters; and in one Piece he saw the Representation of an old Man with an Infant in his Arms, which put him in mind of old *Simeon* and our Saviour. *Atlas*.

Stettin upon the River *Oder*, Lat. 53, 31. From hence *Stralsund* 80 Miles N. W. *Bardt* or *Bar* 15 Miles W. from *Stralsund*. The Arms of this Place are a Man's Head with a long Beard; whence the *Longobardi* or *Lombards* had their Name, who came from thence and the neighbouring Parts into *Italy* Anno Dom. 568. They possessed the North Parts called *Lombardy*, under which is contained the greatest

greatest Part of *Gallia Cisalpina*, now *Piedmont*, *Milanese*, *Montferrat*, the Dukedoms of *Mantua*, *Modena*, *Parma*, *Bergamo*, *Brescia*, *Cremona*, *Verona*, *Vicenza*, *Bononia* and the Western Part of the State of *Venice*.

Rugen, an Island. There is the Lake *Jas-mund*, of black Water very deep. *Cluverius* in his *Germania Antiqua* says, The Inhabitants reported that it would neither bear Boats nor Nets; and that in his own time some People carried a Boat thither, and next Day came with Nets to fish, when to their great Surprize they saw their Boat upon the Top of a tall Beach-tree; and asking which of all the Devils carried it thither? they heard a Voice, but saw no body, that said, *'Twas not all the Devils, but only I and my Brother Nicholas*. Upon which the Author observes that the unclean Spirit, being angry that his Worship there should be abolished, loves still to play his Tricks. For here the *Pagans* used to consult the Devil and to sacrifice Christians, Lat. 54. *Harris*.

Bremen upon the River *Weſer*, belonging to the King of *England*. There is an ancient Cathedral, wherein is a Vault, the Air whereof is so subtle and dry that Bodies have been found there uncorrupted sixty or seventy Years after they were buried; and I myself, says the Author, was shewn the Corps of a Girl that died thirty Years ago of the Small-Pox, which, notwithstanding the Nature of the Distemper, appeared hard, uncorrupted and dry. In the Market-Place stands a huge *Colossean* Statue of Stone,

Stone, placed there in Memory of one *Rowland*, a great Defender of the Privileges of this and several other Cities. Lat. 54, 30. *Harris.*

Brunswick, Lat. 52, 20. A great Part of the *Hercynian* Forest did run thro' this Country, and is now divided into Parks and Woods: There Wheat and Rye sometimes grow to that height as to exceed the tallest Man on Horseback. Here is excellent Mum made of Wheat and Barley mix'd, and they transport great Quantities. *Hanover* is thirty-two Miles West from *Brunswick*; here is a good Trade by a pleasant Malt Liquor call'd *Brewban*, which they export in great Quantities. In this Territory twenty-seven Miles from hence is *Hamel*, where many Children were led into a Cave by Magick on the Top of the Hill of *Coppleberg*.

This Place was much infested with Rats, and the People agreed with the *Pied-Piper* (as he was called) to destroy them; which being done, they would not pay the Price agreed upon. Therefore, in Revenge, the Man whilst they were at Church, went about the Town playing upon his Pipe; 130 Children followed him to the Hill into a Cave, and never were seen more. There is a Monument at the Mouth of the Cave, and they date their Writings from the Day of the going out of the Children. But according to a Tradition in *Transilvania*, these Children were carried thither, and there are many Persons at this Day who own themselves for their Posterity. *Harris.*

Alba

Alba Julia or *Weissenburg*, a large Town of *Transilvania*, beyond the *Hercynian* Forest, was the Seat of the Kings of *Dacia*, and afterwards of the Princes of *Transilvania*. Here is a fine Palace and so well fortified that it is reckon'd impregnable. There is a Gun so large as to require some hundreds of Oxen to draw it. In the Country they keep Corn under Ground many Years without Damage. *Brofs* is a neat City, sixteen Miles South West from *Weissenburg*, and appears to have been a *Roman* Colony by an Inscription on one of the Gates to the Emperor *Trajan*.

Near *Leige* there is a Village called *Span* or *Spaw*, famous for Medicinal Springs, from whence other such Waters borrow the Name of *Spaw*. *Halten* is famous for Salt Pits, one of which is six thousand three hundred Feet deep; it is not said perpendicular, and the Account is defective; I suppose it consists in Windings and level Ways from one Depth to another. *German* Authors say that an human Body was found here in the Middle of a Rock of Salt, with Limbs, Hair and Cloaths uncorrupted; and by the ancient Dress it seem'd to have laid there for several Ages.

Trent on the *Adige*, Lat. 46. It is called *Tridentum*, from three sharp Rocks on the *Alpes*, which hang over the Town and resemble Teeth: The Cathedral is fine Architecture, and there is an Organ which imitates all musical Instruments, and the Singing of Birds, and Cries of Beasts so naturally that it is hard to distinguish

stinguish them. The famous Council began here Jan. 4. 1545, and continued till 1563. Nothing material was done in the first eighteen Years, and then the Pope and his Council got the Ascendant, so that every thing resolv'd was directed by them; which occasion'd the bitter Sarcaſm of the *Hungarian* Bishops, That the Holy Ghost was sent thither from *Rome* in a Cloak-bag.

Constance. It is worthy to be noted that the Council of *Constance* sentenced *John Hus* and *Jerom* of *Prague* to be burned, contrary to the safe Conduct of the Emperor, who being present for some time opposed it, but complied and saw the Sentence executed. To justify this Antichristian Practice, they made a Canon, That no Faith was to be kept with Hereticks, nor those suspected of Heresy. I rather mention this because some Moderns have absurdly interpreted that Saying, as if the Meaning of it was that Hereticks were not to be trusted; whereas it is a Cloak of Maliciousness, and a Vindication of Falshood. *Atlas.*

Paderborn. There is a black Slate that yields first Copper, and out of a hundred Weight ten or twelve Ounces of pure Silver, and this Stone every where hath upon it Figures of Fishes, Frogs, &c. in Strokes of Copper. *Tonbury* Workmen found under a Hill the Bones of an Elephant supposed to be buried there at the Deluge: There is a Fountain which sends forth three Streams very different from one another in Colour and Taste: There is a
Spring

Spring which disappears twice in twenty-four Hours, and returns with such Violence that it drives three Mills near its Source. *Atlas.*

Switzerland. Mr. *Addison* saith that the Confusion of Mountains and Vales affords a more probable Reason than any he had met with for those periodical Springs in this Country; for the Tops of the Mountains cast their Shadows one upon another, and hinder the Sun's shining on some Parts at certain Times; heaps of Snow lying two or three Hours together are in the Shade for a Time; a Spring that rises from that Snow will flow at such Hours of the Day when the Snow begins to melt, but as soon as the Sun leaves it to freeze again, the Spring dries up, and receives no more Supplies till about the same time the next Day. *Zurick*, Lat. 47, 10.

But this Observation will not account for the Spring at *Paterborn* and others in *Germany* which are not near such high Mountains; nor such as are at the Bottom of Hills or far from the Tops of Mountains. There is a Spring near *Mastricht*, which, instead of rising from below, drops down into a Basen from a Rock above twenty-five Fathom thick: These are Arguments that the larger Springs proceed from the Sea, as they find open subterraneous Passages; for they cannot be maintain'd by Rain or Snow, altho' lesser Springs may. In the Earldom of *Mansfield* there is a Lake in which Stones are found exactly like Frogs and divers sorts of Fishes.

Laufan. The Cathedral Church had its Wall opened by an Earthquake, and shut again by another Earthquake some Years after, so that it is hardly to be discern'd. Mr. *Addison* saw it, and says there are several in the Town living who have pass'd through it : The Lake of *Geneva* begins here, being fifty Miles long and eight Miles broad. Near *Chambery* there is a pleasant Water-fall from one of the highest Rocks, which being continued by three or four more gradual Falls joining into a Current, and from a vast height spreading among the craggy Precipices, produces here a natural but more delightful Cascade than all the Art and Expence of *Versailles* are able to afford. Dr. *Northleigh.* *Geneva*, Lat. 45, 45.

Mayence. A certain Archbishop of this Place being asked Alms by a Company of poor People, call'd them Rats, and order'd them to be burn'd in an old Barn ; after this he was haunted by Rats, which climb'd up the Walls to come at him : He fled to a Tower upon a small Island in the *Rhine*, nevertheless the Rats scal'd the Walls and devoured him. Mr. *Misson* saw the Ruins of this Tower, which to this Day is call'd the *Rat's Tower*, and says, tho' some reckon it a Fable, yet it is believed by the People hereabout who produce several Histories of it, related by Persons of unquestionable Authority. *Harris.*

Near this City the three *Roman* Legions under the Command of *Varus* were defeated. The *Cherufci*, who were the ancient Inhabitants

tants of *Lunenburg*, with their Neighbours who possess'd the present *Brunswick* and *Hanover*, surpriz'd these Legions. The Emperor *Augustus* was so grieved at the Loss that he used to cry out in a sort of Madness, *Varus, restore me my Legions*. Higher up on the *Rhine* is *Hocham*: In the Country round about there is excellent Wine, which from this Place takes the Name of *Old Hock*. *Mayence*, Lat. 50, 6.

Worms is seated near the *Rhine* in a most fruitful Country, once a famous City, but now is become poor by the late Wars. Mr. *Misson* saw a House there that was sold for one thousand Crowns, which formerly had yielded as much annual Rent: Here *Luther*, being call'd before the Diet, and being heated in a long Debate, desired a Glass of Wine, which was set upon a Bench: He was so eager in his Discourse that he forgot to drink it, and it broke in Pieces without any Body touching it; whence the *Lutherans* concluded that there was Poison in the Wine: They broke the Bench and keep the Pieces as a Memorial of his great Deliverance. Lat. 49, 35. *Misson*.

There is a Church dedicated to *St. Martin*, at the Entrance of which is a very gross Representation of God the Father like an old Man, at the Top of one Corner, from whence he seems to address himself to the Virgin *Mary* who is on her Knees in the Middle of the Picture, holding the Infant *Jesus* by the Feet, and putting his Head into the Hopper of a Mill which is turned about by the Twelve

Apostles. Hard by the Pope is painted upon his Knees, receiving the Hosts of Wafers which fall ready made from the Mill into a golden Chalice; one of which the Pope presents to a Cardinal who gives it to a Bishop, the Bishop to a Priest, and the Priest to a Layman. *Misson.*

Bavaria the Upper. Between two small Rivers which fall into the *Danube* and the *Main*, there are the Ruins of a Canal, begun by *Charles the Great*, with a Design to make a Passage between the *Danube* and the *Rhine*; but he gave it over. *Dr. Nicholson* says the Workmen were obliged to desist by excessive Rains and frightful Apparitions. This Country being called *Noricum*, in the Time of the *Romans*, was famous for Sword Blades; whence *Noricus ensis*. *Munich* the chief City was built *Anno Dom. 965*. There is in the Vestry of the *Jesuits* Church a Joint as big as that of an Elephant, which they say was one of the Joyns of *St. Christopher's* Back-bone. Lat. 48. *Misson.*

Ausburg, the Metropolis of *Swabia*, the Country of the *Vindelici*; whither *Augustus* sent a Colony, and call'd it *Augusta Vindelicorum*. The Town-House is a noble Building, the Rooms wainscotted and ceiled with Ash Wood of *Poland*; which looks very fine, adorned with Sculptures richly gilt: They are very ingenious in Clocks, Goldsmiths Works and Ivory; they make Chains of Steel so fine that they are fasten'd about a Flea's Neck, and tho' they

they are a Span long, a Flea lifts one up when it leaps. It is famous for the Confession of Faith, according to the reformed Religion. The Confession of *Ausburg* was presented to *Charles V.* by *Melancthon* and *Luther* *An.* 1540. Lat. 47, 30. *Atlas.*

Heidelburgh, Lat. 49, 10. The great Tun there contains two hundred Tuns of Liquor; instead of Hoops it has large Knee-timber, like the Ribs of a Ship, and has forty-three Steps on one Side, leading to a Gallery on the Top; it is finely painted and carved. It belongs to the *Palatinate*; and here the Elector has a Palace, where he shewed to Mr. Ray the Curiosities of his Closet, and among the rest, a Purse made of *Alumen Plumosum*, which being made red hot received not the least harm, but appeared the same it was before, after it was cooled. This I suppose is the same with the *Amianthus* of Italy. There are two Horns eight or ten Foot long, said to be the Unicorn's; but they are, says Mr. Ray, the Horns of a Fish, and not of a *Quadruped*, as the Ancients vainly imagined. *Harris.*

Cologne, Lat. 51. Here are the Tombs of the eleven thousand Virgins which were slain by the *Huns* *Anno Dom.* 238, together with *St. Ursula*, whose Grave was for some Time unknown, but discover'd by a Dove, as signified by the Inscription. *Sepulchrum Sanctæ Ursulæ indicio Columbæ detectum.* Here a Lady was buried *Anno Dom.* 1571, and came to Life again, the Sexton having open'd the Grave

for the sake of a Ring. *Treves*: Nigh hand is a Vale, where there is a Fountain, whose Water boils up with great Waves cover'd with Flames; and the Ground about it sends out Flames and Smoke, yet the Water is cold. This was the Seat of the ancient *Treviri*, a valiant People mentioned in *Cæsar's Commentaries. Atlas.*

Dresden in *Saxony*, Lat. 51, 20. Here is the Figure of a Horseman that moves with a Spring and carries a Cup of Wine in his Hand, and a Gun that discharges forty times without Intermission. Here is an Unicorn's Horn, which they affirm to be of a Land-Unicorn, because it is neither wreathed nor hollow, as the others are before-mentioned. There is a Chamber of Rarities in Mechanicks, a great Variety of Clock-work, a Cuckow singing, a Horseman riding, a Ship under Sail, an old Woman walking, a Centaur running and shooting, and a Crab crawling or creeping upon a Table. There is the Picture of a *Laplander*, and a *Lapland Magick-Drum. Dr. Brown, Harris.*

Inspruck, Lat. 47, upon the River *Inn*. Near it is the Lake *Czirnitz*, eighteen Miles long and eight Miles broad. It has on the East-Side a Forest of Pear-trees, and is encompassed round with Mountains, so that there is no Current of Water coming in, nor any Passage out, but under Ground. There are many Cracks in the Bottom by which the Water sinks away constantly in the Month of *June*, and in *September* returns with such Violence that

that in three Days it rises to the Height of a Pike. After the Retreat of the Water it affords good Pasturage; and much Fish being left dry is taken up by the People, who can give no Reason for this *Phænomenon*. *Atlas*.

They have here the Skin of a Serpent fifteen Feet long, and there is a Tree which hath the entire Body of a Deer enclosed in it. It has been a hollow Tree with a Hole at the Bottom, into which the Deer very young has crept, and the Tree has grown like a Shell about it, yet left Room for the Creature to grow, and it might live some Time. There are several Instances of Creatures being inclosed in hard Substances, yet have lived. See *Italy*. In a Gallery there is an admirable Piece of Painting of *Noah's* Rain-bow; for which they say the Duke of *Tuscany* offered an hundred thousand Crowns. *Misson, Harris*.

Nuremberg is said to be the Glory of *Germany*, and considering its great Distance from the Sea, the Wonder of *Europe*, for Trade and Number of Inhabitants. No City in the World has a greater Number of curious Workmen, nor affords artificial Works so cheap. They are famous for Clock-work. A Coach was made here for the King of *Denmark* which would go a League in an Hour, only managed by two Boys. For the Dauphin of *France* was made a Squadron of Horse skirmishing with a Battalion of Foot, marching and firing by Clock-work. It is a free Imperial City, Lat. 50. Lon. 39, 30. *Atlas*.

There

There is a publick Cellar two hundred and fifty Paces long, in which they have generally twenty thousand middle-fiz'd Tuns full of Wine. There is a Well sixteen hundred Foot deep, and the Chain which draws up the Buckets is three thousand Weight. At *Wurtzburg* there is a Pump with three Branches, that raises Water from the River to the Top of a Castle on a Rock two hundred Fathom high. The Bishop is Prince here, in whose Cellars there are always sixty great Tuns of Wine, which contain near forty Hogsheads each; and they pretend to have Wine a hundred Years old. The Bishop's Revenue consists much in Wine. *Atlas.*

Franconia. Mr. *Wright*, in his Travels with my Lord *Parker*, pass'd through several Woods in this Country, whose Under-woods were chiefly Juniper, and most of all the way to *Cologne*. It is there called *Genevre*, whence the Liquor is named; which is a compound Spirit from Juniper-Berries, made in greatest Perfection at *Cologne*, and sent down the *Rhine* to *Holland*. The People of this Country, after the *Romans* withdrew, invaded *Gaul*, and having settled there gave it the Name of *France*. *Frankfort* is now the chief City, seated upon the River *Main*, where the *Franks* used to pass and repass whilst they made War upon the *Gauls*. It was a Fort then called *Trajectum ad Menam*. *Dr. Brown.*

Vienna. The River *Danube* here has great Plenty of Fish, and one sort uncommon, call'd the

the *Heufon*, a very large Fish, some of them twenty Foot long; which are supposed to come out of the *Euxine-Sea*. They taste like a Sturgeon, and have a hollow nervous Chord down the Back; which when dried they use instead of a Whip. When they fish for them they blow a Horn or a Trumpet, the Noise of which brings great Shoals about their Boats. There is a Fish called the *Grundel*, that has six Beards, two short and four longer. It is a very populous City, and nothing is more delightful than to see *Turks, Tartars, Greeks, Germans, French, Italians, Polanders, Spaniards, Hungarians, Croatians, Transilvanians, Slavonians*, all in their proper Habits. Lat. 48, 27. Dr. Brown.

Tyrnstein, sixty Miles West of *Vienna*. Here *Richard I.* King of *England* was kept Prisoner, because he took down the *Austrian* Banner at *Joppa* and cast it into the House of Office. The Duke built the Walls of *Vienna* with his Ransom, which was one hundred and forty thousand Marks, a Sum so great in those Days that the *English* were forced to sell the Church Plate to raise it *Anno Dom.* 1192. *Echard* saith that the Emperor had one hundred thousand, and the Duke of *Austria* fifty thousand. In the Reign of *Henry I.* 1130, Wheat for one Day's Subsistence of a hundred Men was valued at one Shilling, a Ram or a Sheep at Four-pence, Money being then more than twenty times the Value that it is at this Day. *Echard*.

Baden,

Baden, eighteen Miles S. W. from *Vienna*. There are several natural Baths; the Water of that called *Duke's-Bath* is blueish and clear; it heightens the Colour of Gold, but turns other Metals black in a few Minutes; it gives a fine green Colour to the Moss and Plants which it washes in its Way, and leaves a Scum of Purple mixed with White. The Water of that called *Sowre-Bath* turns Silver black, and gilds it if held at a Distance; but when the Water is cold it doth not change the Colour of any Metal. The *German* Physicians commend those Waters for the Head-ach, Dimness of Sight, Deafness and other Diseases of the Head; and likewise for the Gout, Dropsy and other chronical Distempers. *Atlas*.

Moravia lies betwixt *Bohemia* and *Silesia*, the Capital is *Olmütz*, Lat. 49, 40. The Water in many Parts is pestilential, because of a Mixture of Lime and Nitre in the Soil that gives a Tincture to the Corn, Fruits, &c. perhaps there is too great a Quantity, or some Quality different from others, which occasions the Stone, Gout and Cholick. But Providence has provided Baths and medicinal Fountains, good against these and other Distempers. There is a Beast peculiar to their Forests; he is about as high as an ordinary Dog but thicker; his Belly and Feet are spotted, he leaps suddenly on his Prey from Rocks or Trees. *Brin* is noted for the *Unicorn* Minerals which resemble Branches; and some think it a Petrifaction of Timber.

Stiria

Stiria lies South from *Austria*. The Inhabitants of this and neighbouring Countries are often troubled with extraordinary Swellings in their Throats, which sometimes cause them to lose their Voice and Senses; so that most of the Towns have Hospitals for such as are afflicted with the Distemper. The Swellings sometimes hang so much below their Throats, that the poor Women are forced to tie them up when they suckle their Children. This Distemper is frequent about the *Alpes*, and is ascribed to the Snow-Water which falls down from the Mountains into their Rivers and Brooks; for the better sort, who drink good Wine and Beer, are seldom troubled with it.

Atlas.

Dalmatia was anciently part of *Illiricum*, bordering upon *Albania* and *Servia*, which bounder upon *Epire*. *Dalmatica Vestis* is famous in Authors, being first woven here. It is a long white Robe without Sleeves, embroider'd with purple Spots resembling Studs. It was first used by the Priests, and was in such Esteem in the Church that *Eutychianus* ordain'd that no Martyr should be buried without it; which *Gregory the Great* looking upon as Superstition, forbad the use of it. The Church of *Rome* have made much to do about it, permitting its use sometimes to Presbyters and Deacons, and at other times restraining it to Bishops. The Emperor *Commodus* wore it, as did *Edward the Confessor* of *England*; but

Writers

Writers tax such Princes as use it for Effeminacy. *Baronius, Collier.*

Hungary, Nitra. This Place is famous for Silver Mines. Dr. Brown went down into one of them by a Ladder of three hundred Steps, at the Foot of which there was an Engine which pump'd up the Water by a Wheel, which moved several other Engines and carried up the Water to a neighbouring Valley. At *Hermgrundt* there is a Copper-Mine, which, for Number of Workmen and Passages, looks like a subterraneous City, and yields to the Emperor one hundred and twenty thousand Pounds Sterling *per Annum*. There are also two Springs, which in fourteen Days time turn Iron into Copper, better than that of the Ore, which must be often melted to make it useful; whereas that turned by the Water is soon melted and very malleable. Dr. Brown.

Altenzol. There is a Gold Mine ten *English* Miles long, that has an horizontal Passage one hundred and seventy Foot deep, and eight hundred Fathoms long; has six perpendicular Pits, one of them one hundred and fifty Fathoms deep, and lined with Planks; the Miners direct themselves by the Compass. They convey the Ore in a little Chariot with four Wheels to the Bottom of the Pit or Shaft (where it is to be drawn up) upon a Channel of Wood, like our Waggon-ways: A little Boy drives it before him without any light. These Chariots are drawn up carrying three or four hundred Weight

Weight of Ore. This Description is very like one of our Collieries in the North, in one of which there are four, five or six Pits, having a Communication one with another. Dr. Brown.

Bulgaria. *Verna* is near the *Euxine Sea*, noted for the Defeat and Death of *Ladislaus* King of *Hungary* by the *Turks* Anno 1444. The *Christians* and *Turks* having made a Truce, which that King broke by the Perswasion of the Pope, the *Grand Turk Amurath* finding the Day like to go against him, pulled the League out of his Pocket, holding it up towards Heaven, and appealing to *Christ* against that Perfidiousness, obtained the Victory. *Riccat's Hist.* v. 1. p. 167. *Tameswaer*, on the River *Temes*, now a large Town, supposed to be the *Temæa*, whither *Ovid* was banished; 33 Miles N. E. from *Belgrade* which is the last Town in *Hungary*, Lat. 44. 55. m.

Poland. In the Southern Parts are divers Mountains, out of which they dig Salt in large Pieces, like Stones out of a Quarry; and out of others natural Earthen Cups, which being exposed some time in the Air, become as hard as Stones. *Hussars* were first used in *Poland*. They are a kind of *Gens d'arms*, composed of Gentlemen, and of handsome Personages; for Equipage the finest Cavalry in *Europe*, armed *Cap-a-pee*, each having two Servants armed with Head-pieces, Lances, &c. In the Lake *Goplo* near *Causwick* there is a Brick Castle, where Duke *Popiel II.* of *Poland* was devoured
by

by Rats, as a just Punishment from Heaven, he having poisoned his Relations at a Banquet. *Harris.*

Cracow, Lat. 50, 10. Here are Mines of *Sal-Gemme*, which are 200 Fathoms deep, and constantly employ above a thousand Men, and yield a vast Revenue to the King. *Wielitz*, ten Miles from *Cracow*, is noted for Quarries of excellent Rock-Salt, which employ many Men and Horses. There is a black Salt which they cut into Pieces of three *Polish* Ells long and one thick; they lay them before their Doors that the Cattle may lick them. There is here a sort of *Manna* found upon the Grass in *May* and *June*, which they sweep off with Sieves, together with the Dew, and make several Dishes of it.

Culm. Near to this Place is a Fountain which sends forth a mighty sulphureous Steam, and yet the Water is never hot. There are Salt-Mines 300 Paces deep, which have so many Alleys and Passages one can scarce go over them in a Week's time. On one Side of the Mines there is a Stream of salt Water, and on the other Side one of fresh; and in some Places none can work, because there are sulphureous Vapours which the Candle sets on Fire. There is a Lake called *Briales*, which in *April* and *May* dyes the Skins of those that wash in it of a swarthy Colour. *Atlas.*

Warsaw the Metropolis, Lat. 52, 12. In the Country there is a kind of black Cattle called *Owrs*, that are wild; the Bulls have short

short black Beards, Bushes of Hair upon the Forehead, and very wide large Horns. There is a sort of Buffaloes called *Bisontes jubati*, having Manes like Horses and Beards on the lower Jaw; their Tongues hard like a File; they have Bunches on their Backs, and their Hair smells like Musk; they are good Meat, and hunted by the Nobility. There is the Elke, about the Size of a large Horse, shaped like a Stag but broader; and has large cloven Feet. They are very subject to the falling Sickness; and their Hoofs are reckoned a Specifick against that Disease. *Atlas.*

Rossomakas, found in *Poland*, is a voracious unserviceable Beast, says the Author, like a Wolf in Body and Tail, and in Face like a Cat. He feeds on Carrion, eats till his Belly swell to the utmost, and then squeezes himself between two Trees till he vomit, being as it were sensible of his Occasion; after that he returns to his Prey, and successively to his Vomit, then to his Prey till all be gone; an Emblem of some sort of Men whose God is their Belly, who mind Earthly Things, and are—*Telluris inutile pondus*: yea, some are much worse, who use their Reason to deceive, and to contrive Mischief. And there is no doubt but this wild Creature would be serviceable, if Experiments were made and the intended Uses found out.

Kiow, the chief Town of that Palatinate, part whereof is the Country of the *Polish Cossacks*, lying along the *Boristhenes*, Lat. 49. The

Turks possess the lower Part of this River, at the Mouth of which is *Oczakow*, lately taken from them by the *Russians*. Here is a Beast called *Boback*, which resembles a *Guinea Pig*. They dig Holes in the Ground, which they enter in *October*, and come not out till *April*. They have separate Apartments for their Provisions, Lodgings, and for their Dead. They live together eight or nine Herds in those Caves; and when they go out for Provisions they set a Centinel, who makes a great Noise when he sees any body, and then they all run in a vast Hurry to their Holes; but they are easily taken and very diverting in their Actions. *Atlas.*

Dantzick stands upon a Branch of the *Weyssel* or *Vistula*, and two other Rivers, *Motlave* and *Rodaun*, on which there is one Corn-Mill, which pays to the State 4320*l.* Sterling a Year, besides the Profit it brings to the Proprietors. There are besides several Mills on the other Rivers. *St. Mary's Church* is a very stately Fabrick, has forty-eight Altars and 3722 Windows. The Houses are generally six or seven Stories high, part of Stone and part of Brick. Their Trade is in Corn from the Country in *Poland*, which produces great Plenty. They export 730000 Tuns of Rye one Year with another, and a considerable Quantity of Wheat. It is a free Town under the Protection of *Poland*. *Atlas.* Lat. 54, 25.

Denmark. *Copenhagen*, the chief City, Lat. 55, 30. *Sleswick*, 55 Lat. Between this Place

Place and *Hensburn* there is a small Village called *Anglen*, which is remarkable for giving its Name and partly an Original to the *English*. For from this Place and the adjacent Parts the *Angles* came with the *Saxons* into *Britain*. The *Cimbrians*, whom *Marius* defeated, went from *Cimbrica Chersonesus*, the principal Part of *Denmark*, that is, *Jutland*, *Holstein* and *Sleswick*, 101 Years before *Christ*. This Country being deserted, the *Asæ* took Possession of it, and from them came the *Angli*. These came from the Country now called *Georgia*, between the *Euxine* and *Caspian Sea*. This is a very remarkable Passage in *Dr. Prideaux's Connection*, vol. 2. p. 378.

Amalienburg, one of the finest Castles or Houses of Pleasure belonging to the Crown. It was burnt down in the Year 1689, on the King's Birth-Day, whilst an Opera was acting in which *Mercury* acts a Part; and it was observed, just as he appeared over the Theatre, repeating a Verse with these Words, *Thunder, Thunderbolts, Fire, Hail, Lightning*, a Candle set the Scenes on Fire, which spread with such Violence and Swiftneſs that the House was consumed, with 300 Persons, and many of them of Quality. This Place is near *Copenhagen*, in the Isle *Zealand*, over-against *Schonen* belonging to *Sweden*, where the *Baltick* is entred by a narrow Strait; and there is no Tide but always a sufficient Depth of Water.

Atlas.

The chief Bishops of *Denmark* used formerly to have their Episcopal Staffs of the Sea-Unicorn's Horn; which Creatures much frequent the Coasts of *Iceland*. There is one of these Horns in *Gresham-College* eight Feet long. Among the King of *Denmark's* Rarities is to be seen the Skin of the *Lamb-Plant*, which one cannot distinguish from the Skin of an ordinary Lamb. It grows in *Muscovy*, and shall be described in its proper Place. In *Jutland* is *Hamburg*, under the Protection of *Denmark*, well situate on the River *Elbe*, and famous for its Trade with *England*. On the other Side upon the *Baltick* is *Rostock*, which exports great Quantities of Beer; they have 250 privileged Brewers, who brew each as many Tuns in the Year, Lat. 54. *Atlas*.

Norway. *Drontheim*, Lat. 66. There is a Lake, altho' so far North, that never freezes in the coldest Season. There is a Bird called the *Loon*, as big as a Goose, prettily speckled; in one respect differing from all other Birds, that their Legs are broad and flat, and their Claws almost like a Man's Nail. Their Legs are joined to their Loins near the Rump, that they may both swim and dive with Ease and Swiftnes; and their Bodies being hereby extended so much the farther from the Center of Gravity, it becomes more laborious to them to walk, and so inclines them to keep more upon the Water as their fittest Place; and because they are great Divers they are called *Colymbi*. Dr. Grew.

North

North of *Drontheim* a few Leagues, and not far from the Coast is that dangerous Gulph or Whirlpool called *Maelfroom*, occasioned by some large subterraneous *Hiatus*. At the time of Flood it forms a terrible Whirling for two Leagues round, which swallows up every thing that comes near it ; and during the six Hours Ebb, throws out the Water with such Violence that the heaviest Bodies will not sink in it but are cast back by the Force of the Stream. The Fishermen catch abundance of Fish during the Ebb, when being forced up they cannot dive again. It is supposed to empty its Water by a Passage under Ground in the Bay of *Bothnia* ; as *Herbinius* maintained in a publick Dissertation at *Copenhagen*. *Atlas*.

Norway formerly was infested with Evil Spirits by reason of the Peoples Carelessness and Neglect of Religion. *Dobes* the Historian, a Person of Credit, gives a strange Relation of his own Knowledge *Anno* 1667. A young Man well disposed to Religion was visited by an Apparition in a bright kind of Figure : It conversed with him in a seeming Piety, and seemed to pray along with him. The Youth thinking it to be a good Angel, at last he tempts him to commit Fornication, and would make him believe it was no Sin. Here the cloven Foot appeared, and the Deceiver was deceived : The young Man applied to Divines, continued with them for some time in Prayer and pious Conversation ; and the Tempter troubled him no more. *New Atlas*.

Here the Devil, as St. *Paul* forewarned, transformed himself into an Angel of Light. But why does not the Divine Goodness bind up or rather destroy Evil Spirits? It is not consistent with the Wisdom and Justice of God to annihilate Creatures of an immortal Nature, nor to destroy the Liberty of Free-Agents; Man being made for a better State, he puts him upon a Trial to make him sensible of his great Concern, and to reward his Virtue. The Devil works either by visible or secret Motions, according to the Nature of Spirits. He is permitted sometimes to have a full Possession, as in our Saviour's time, who shewed his Power in casting him out. But God is more merciful than we deserve, to deliver us out of Temptations tho' he does not wholly exempt us from them.

For since God designs immense Rewards for Man, he sufficiently shews his Goodness whilst it is very reasonable that Men should have some Work, and obey their Lord's Commands. If Men value not Heaven, nor regard God himself, nor take care of themselves, it is but just that they suffer Loss, and be punish'd, as God is able, in a future State of Immortality; it is just in this World to leave them to themselves, to walk according to the Course of this World, according to the Prince of the Power of the Air, *the Spirit that now worketh in the Children of Disobedience*, Ephes. 2. 2. But if a Man is careful about Religion, *God is faithful, who will not suffer him to be tempted above that he is able,*
but

but will with the Temptation also make a Way to escape that he may be able to bear it, 1 Cor.

10. 13.

Swedeland. This is the Country of the *Goths*, so called from *Gothland*, a large Island in the *Baltick* Sea : That People in the fourth Century broke the Force of the *Roman* Empire in the West, and made Way for other Invasions : They have a singular Way of sowing their Corn, they burn down whole Forests, and sow their Seeds in the Ashes, with some Earth mixed together; and they reap good Crops two Years together, without any further Trouble : Their chief Wealth is their Iron Mines. Near *Gottenburg* is a dreadful Cataract, where a River rushes down a high Precipice into a low Pit, which has been sounded by a Line of many hundred Fathoms, and the Bottom not found. *Atlas.*

Stockholm, Lat. $59\frac{1}{2}$, is almost as large as *Bristol*; their proper Coin is in Copper, made large according to its Value, allowing for the Coinage. There is among the Elector Palatine's Rarities a Copper *Swedish* Dollar of the Bigness of a square Trencher, with the King's Arms and Effigies stamp'd at the four Corners : There is the *Otter* or *Water Pole-Cat*; he makes himself Burrows by the Water side, as a Beaver; being taken young he is tamed, will go out of his own Accord to catch Fish, and bring them into the very Kitchen to the Cook. *Dr. Grew, Harris.*

Lapland, belonging to *Sweden* and *Muscovy*. To this Country Flocks of Swans come in the

The Wonders of Nature

Spring from the *German Coasts*. Dr. *Fletcher* says the People are utterly unlearned, yet in Witchcraft they excel; tho' the Story of selling Winds by Knots on a Rope is a Fable: But what is not now might have been formerly: For since Christ was preached, and as Religion spread amongst them, Spirits have less appeared, and Magick is less practised. Mr. *Collier* saith they us'd familiar Spirits to offend their Enemies, and defend against other Demons, who act by their Prince's Order; yea, saith he, *there are not wanting Masters that teach diabolical Arts, and Parents bequeath to their Children the Spirits that serv'd themselves*. He mentions their several Ways, by Knots, by a Drum, by Javelins, Charms, &c.

The *Atlas* says the *Laplanders* are much addicted to Magick, in which they use Drums and other Instruments: They pretend also to make Winds favourable or cross to Mariners, and to annoy their Enemies by sending out Imps in the Form of Flies; but they are much restrained of late by the *Swedish* Government: Nor doth it follow that Apparitions have not been seen in *England*, nor Witchcraft practised because there are none now. The Devil doth not like to shew himself among knowing People, but rather to work secretly; and he is more restrain'd where the Gospel is better preached; yet he has many Ways to deceive, and *Beelzebub* is still the God of Flies.

When the Devil is mention'd singly in Scripture, it is either the Prince of the Devils, or is put

put for any evil Spirit that obeys his Orders: For he being a mighty Spirit by Nature, and having been an Arch-Angel, God allows him a kind of Dominion, whereby he opposes the Kingdom of Christ; and hath a Power of acting in the Air, to raise Storms and Tempests as in the Case of *Job*, and to represent to Christ the Kingdoms of the World by Appearances of Airy Figures. Dr. *Lightfoot* well observes that the Devil, being Prince of the Power of the Air, formed an Airy Horizon before the Eyes of Christ, carrying a glorious Appearance of Kingdoms, as if he had really seen them: His Power in the Air must import great Effects, such as to condensate, shape and colour it, to represent what he intends. We must also expect some Trials by false Representations of this World; for we wrestle not against Flesh and Blood (only) *but against Principalities, against Powers, against the Rulers of the Darkness of this World, against spiritual Wickedness in high Places*, Ephes. 6. 12.

Muscovy or Russia. In the Northern Parts, as in *Lapland* aforesaid, the Sun is set for three Months together in Winter, and is seen as long in Summer above the Horizon at Lat. 70. In the River *Volga* are found great Quantities of Stones shaped like *Lemons* and *Oranges*, which being broken in the midst, represent a Star of divers Colours, and some of Gold and Silver. There is a Mountain arising from the same River, which is divided into many steep Hills, upon each of which is a Row
of

of Pine Trees so regularly placed, that were they not inaccessible they would be rather look'd upon as the Product of Art than of Nature. Lat. 53, 48. *Holstein Ambaf.*

In *Astracan* there is a kind of wild Geese or rather Cormorants, says the same Author; they resemble Geese in all respects, except that they are larger than Swans; their Bills are above a Foot and a half long, and underneath there is a Bag of Skin which they can contract at Pleasure, or extend to such a Bigness that it will contain three Gallons of Liquor; and they use it as a Reservatory for the Fish they take, which they swallow as they have Occasion, and carry Part to their Young. *Muscovy* produces several Creatures, whose Skins have a fine Scent that will keep sweet a long time; and from thence call'd *Musk*. The chief City *Moscow* is in Lat. 55, 40.

Samara, betwixt the *Volga* and the *Don* or *Tanais*; there is that strange sort of Gourd or Melon, which they call the *Lamb-Plant*, because it resembles a Lamb in shape, and consumes Grass and Herbs within its reach, and as far as the Stalk reaches; it changes its Place in growing, and wheresoever it turns the Grass withers. When the Fruit is ripe it is cover'd with a Substance exactly like Wool, and has a Skin very like that of a Lamb, which may be dress'd as Tamers usually dress other Skins. The Wolf is the only Beast that will feed upon it, and it is used as a Bait to catch him. The People use this Skin for Lining of their Vests,

Vests, and they call it *Boranez*, that is a Lamb.
Holstein Ambaf.

Noteburg. In the Country there are many Lakes, in which there are two Islands well stor'd with Wood, with an incredible Number of wild Fowl. The Lake *Ladoga* has vast Numbers of Sea Dogs, tho' far within Land; it is hard to say how they come there: But indeed it has an Out-let into the Gulph of *Finland* by way of the new City of *Petersburgh*. From thence about forty *German* Leagues is *Novogorod* on the River *Wolgda*, Lat. 58, 23. There is the Monastery of *St. Anthony*, who, as the *Muscovites* say, came up the River *Wolgda* to *Novogorod* upon a Mill-stone, having sail'd from *Rome* down the *Tyber*, and cross'd the Seas on that Vessel, and, says the Author, they shew'd us the Mill-stone, which they say is the same upon which he cross'd the Seas. *Holstein Ambaf.*

Arch-Angel and the *Bay of St. Nicholas*, Lat. 63, 50. In Winter the Country lies under Snow, some times two Yards thick, which being melted it is wonderful how soon the Fruits grow, that are sown and reap'd in three Months. This is imputed to the Snow preserving some Warmth, and leaving an impregnating Moisture in the Earth. The Air is so sharp in Winter, that if you cast up Water high it freezes before it comes down, yet the Summer is warm when the Ice is not melted; then the Seals lie sunning themselves upon the Ice; many are taken by a Number of Men
who

who surround and invade them with Clubs; they use their Fat in oiling Wool, the best sort which lies uppermost, and the grosser to make Soap. Dr. Fletcher.

Above *Arch-Angel*, on the River *Dwina*, there is a soft Rock called *Slude*; this they cut in Pieces and tear into thin Flakes which they use instead of Glass for Lanthorns; it gives a clearer Light, and is better than Glass or Horn, because it is not apt to break or burn. The River *Volga* has plenty of Fish, and some uncommon sorts; the *Bellonga* four or five Ells long, the *Severign*, *Sturgeon* and *Stertedy*, which is like a *Sturgeon* but less; they are all delicate Meat, and of the Roes of these four Kinds *Caveare* is made, which is accounted an excellent Food: This River runs into the *Caspian* Sea, in length two thousand eight hundred Versts, a Verst is three Quarters of a Mile. The *Isinglas* is made of a certain String taken out of the Back of the *Sturgeon*. Harris.

Siberia. Here the River *Oby* divides *Europe* from *Asia* in the North Part, and runs into the North Sea over-against *Nova Zembla*, at Lat. 70, and 60 Degrees East of *London*. The People called *Semöjdes* inhabit both sides of the River; they are of low Stature, with broad flat Faces, little Eyes and short Legs, wearing their Hair long not unlike the *Greenlanders*; they wear a sort of Cassock, which in Winter is put over their Heads, the Face appearing only thro' the Cleft at the Neck, which has occasioned some Historians to impose upon the
World

World a People without Heads, and their Faces on their Breasts: They are very ignorant, and worship an Idol in the Form of a Man which they call *Saitan*. *Atlas*.

Ambassador *Ides* being in *Siberia*, some of the Natives came on board his Ship in the River *Oby*. One of his Servants having a *Nuremberg* Bear of Clock-work, which beat a Drum and turn'd his Head and mov'd his Eyes, the *Siberians* took it for a *Saitan*; they danced to its Honour, and said it was the best *Saitan* they ever saw; and if they had such a one they would hang it all over with black Fox and sable Skins. They asked if it was to be sold; but the Ambassador ordered it out of their Sight, to prevent their further Idolatry. The Mouth of *Oby* is scarce ever free from Ice. The Ambassador had a small Ship built there, to carry him up that River towards *China*.

Nova-Zembla. Between this and the Mouth of *Oby* is *Weygate* within the Strait, where Sailors have sought a North-East Passage to *China*, but were prevented by Ice. The North Part is in 76 Deg. Lat. Here the Sun sets about Oct. 1. and appears again about the middle of Feb. But they have a long Twilight; and from May 1. for three Months the Sun never sets; yet they reckon it Night when the Sun comes to the West, and when he comes to the East the beginning of another Day. His greatest Height is 33 Degrees at Noon, and then he is seen at Midnight 4 Degrees above their Horizon; when going round he makes a
warm

warm Summer, but his Absence so long together causeth an extreme cold Winter. *Harris.*

In those Parts the North-Light is frequently seen, which is sometimes seen in *England*, called *Aurora Borealis*; but there it appears more large; it is like a Pillar or Beam of Light-Fire, which darts its Rays every Way, moves from Place to Place. It is commonly about the time of the New Moon, and enlightens *Norway, Russia, Greenland, &c.* I take the Cause of this Light to be the Sulphur and Nitre raised up with the Vapours from Land and Sea, the same that in Southern Countries becomes Thunder and Lightening, when the Sun hath Strength to set it on Fire, whilst inclosed in a thick Cloud, from whence it is discharged with Thunder. But where there is less Heat the Sulphur only exerts itself in those streaming Lights.

Spain. At *Orense* in *Gallicia* are several Springs of hot Medicinal Waters. At *Toledo* there is a Water which near the Bottom is of an acid Taste, but towards the Surface very sweet. I suppose there are two Springs near, and the one above the other, which join in one Receptacle, yet unmixed for a small Way. Near *Guadalaxara* is a Lake which never fails to send out a dreadful Noise before a Storm. The River *Guadiana* dives under Ground, from whence it was formerly called *Anas*. It dives for several Miles, and the Ground above is called a Bridge; from whence its said that there is a Bridge in *Spain* which maintains a thousand

land Sheep; (I suppose for some short time.)
Atlas. Toledo, Lat. 39, 45. *Madrid* 40, 35.

Portugal. Lisbon, Lat. 38, 50. On the
 Top of the Hill *Stella* are found Pieces of
 Ships, tho' it be more than twelve Leagues di-
 stant from the Sea: This would be a Wonder
 indeed, if they be large Pieces, and not porta-
 ble by Strength of Men; but small Pieces
 might be carried for some Use, or perhaps to
 make a Wonder of. Near to *Reia* is a Lake
 that sends forth a hideous rumbling Noise,
 which is ordinarily heard before a Storm, and
 that at the Distance of five or six Leagues.
 About eight Leagues from *Coimbra* there is a
 Lake which draws in and swallows up what-
 soever touches its Surface. This has been tri-
 ed with Trunks of Trees. *Braganza*, Lat. 41,
 30. Lon. 19, 30.

Sardinia, Ivica and *Malta*. These Islands
 in the *Mediterranean Sea* nourish no venomous
 Creatures. The first has no noxious Animal
 except Foxes, and a little Creature like a Frog
 named *Solifuga*, because it lies close in the
 Day-time. The second is one of the *Baleares*,
 which hath no noxious Animal; and yet *For-*
mentera, another of them, is so infested with
 Serpents that it is not inhabited. *Malta*, the
 People say, was blessed by *St. Paul*, and hath
 entertained no venomous Creature since he
 shook off the Viper from his Hand. *Majorca*
 and *Minorca*, with one or two more, are of
 the *Baleares*, all famous for People excellent
 in

in throwing Stones with a Sling, so called from *βάλλειν*.

Sicily. There is the famous Mountain *Ætna*, whose sudden Fires and sulphureous Eruptions are terrible and destructive, as they were *Anno* 1669 and in 1693; of which Writers give a large Account. In the former times a vast Quantity of Matter like melted Lead issued out of its Side, and spread over the Country to the Walls of *Catania*, which is eight Miles distant from it; and some of the said Matter ran into the Sea; what is on Land is hardned like Stone. Near the River *Achates* Agate is found, and takes its Name from thence. It is almost of the Colour of clear Horn, adorned with Variety of waved Veins, Figures of Plants, and sometimes of Animals. It is used for Sword-Hilts, Knife-Hafts, Cups, Beads, &c. *Dr. Grew.* *Syracuse* once a famous City, and always famous by that most eminent Mathematician *Archimedes*, Lat. 34.

Italy. *Rome*, Lat. 41, 50. This City is famous for its ancient Greatness, for curious Works of Art, admirable Antiquities and noble Palaces. But these are described by many Writers, and are not my principal Design. On the Coast are *Charybdis* and *Scylla*, Gulphs not fathomable by the longest Line. *Kircher* says the Waves in those Whirlpools sometimes rise up, whilst others fall down with a great Noise. They swallow up whatever comes near them, and throw it up again on the Shore

of *Taormina* in *Sicily*; altho' the Sea round about is quiet when not raised by the Wind.

Androdus, a *Roman* Slave, had run away from his Master, and being taken he was condemn'd to die; he was expos'd to a Lion in the Amphitheatre at *Rome*. The Lion being kept hungry ran furiously towards the Man, but when he came at him made a sudden Stop, and fawn'd upon him to the Admiration of the Spectators. Thereupon the Man, having told the Reason, was pardoned; and the Lion was given him, by which he got his living. The same Lion had met with him in a Desert, when he had sat down to rest him; and laid his Foot upon his Knee, which he looking upon found a Thorn in it, and pulled it out; the Lion went away pleased, and knowing the Man again shewed his Gratitude. *G. Ilius*, Dr. *Brown*.

Tibur, now *Tivoli*, sixteen Miles from *Rome*. Here some Workmen, having cleft a Stone, found in the middle of it, in an empty Space, a Crab-fish weighing four Pounds, which they boiled and eat. *Alexander ab Alexandro* assures us that he found a wrought Diamond in the middle of a great Piece of Marble; and in another Piece a considerable Quantity of sweet-scented Oil. *Baptist Fulgosus* tells of a Worm found in the middle of a Flint. At *Chillingham* in *Northumberland*, a live Toad was found in the middle of a large Stone, of which was made a Chimney-piece; the Hole divided equally, and is to be seen each half at equal Distance from the middle of the Chimney-piece.

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The Wonders of Nature

The Lake of *Lucrin*, so famous in ancient Times, is now no more than a little Pond about a hundred Paces broad, and a quarter of a Mile long; anciently joined with the Sea, now several Miles from it. *Pliny* and others relate a Story of a Dolphin which frequented this Lake: A Boy that went every Day to School from *Baia* to *Puzzoli*, used to feed this Dolphin with Bread, who became at last so familiar with the Boy that he carried him often on his Back over the Bay. *Appion* tells us he was an Eye-Witness of it, besides many more that flocked from all Parts to see it; and *Solin* affirms that at last it was so common that it was scarce any more regarded as an extraordinary thing. *Harris*.

There are Dolphins of several Sizes; perhaps they are only of different Age, and of Growth accordingly. There is the Head of a Dolphin in *Gresham College*, which is about a Foot and a half long, in Proportion to which the Dolphin is supposed to have been above two Yards and a half long. His Tail is expanded (as the Porpoise's) in a peculiar way, not uprightly, as in other Fishes, but horizontally; by the Help of which he makes his Gamboles above the Water, and at the same time takes his Breath. By this Form, being pretty large, he casts himself forward, and is said to exceed all other Fishes in Swiftnes. *Dr. Grew*.

Sir *Thomas Herbert* gives an Account of *Dolphins*, which he says were no bigger than

a *Salmon*; and that these also were incredibly swift. He was on the Coast of *Zanguebar*, a large Kingdom on the East-side of the Cape of *Good-Hope*; there he saw great Numbers of Dolphins, of which he gives this Description, That they much affect the Company of Men, and are nourished like Men; they are always constant to their Mates, generate by Sperm, embrace, join and go with Young ten Months; so tenderly affected to their Parents that, when they are three hundred Years old, they feed and defend them against hungry Fishes; and, when they die, carry them ashore and bury them. *Harris.*

Baiæ, a Place of most pleasant Situation. There are many Ruins round the Bay, which were Country-houses of the old *Romans*. There is *Piscini Mirabilis*, a large Fabrick under Ground, supported by forty or fifty huge square Pillars; its Length one hundred and fifty Paces. You descend into it by many Steps; on the Top are still some Stone-Spouts, by which they used to let in the fresh Water into this subterraneous Reserver, to keep there for the *Roman Gallies* which used to harbour thereabouts. Near to this are the *Elysian-Fields*, so famous among the Poets for their Beauty, but now an ordinary Plat of Ground. *Orvieto* is famous for its Antidote against Poison, from thence called *Orvietan*; and other Antidotes take the same Name. *Harris.*

Pisa in *Tuscany*. There is the *Leaning Tower*; it is doubted whether made so by Art, or

by the shrinking of the Ground. Its Height is one hundred and eighty eight Feet; the Figure an exact Cylinder. Mr. *Misson* let down a Plummet from the Balcony on the Top, and found that the Lead touched fifteen Feet from the Foundation, yet it stands very firm. *Mantua* was a Town of the *Cisalpine Gauls*, said to be older than *Rome*. There is a Bridge called *Pont de Molini*, because it hath twelve Mills in its Arches. It has many Palaces belonging to Noblemen, who were once so numerous that they had six hundred Coaches in the City. The Duke's Palace hath 550 Rooms. *Atlas*.

Ravenna. Lat. 44, 30. This was the best Harbour that the *Romans* had on the *Adriatick-Sea*, but now three Miles distant from it; yet the Iron Rings to which Ships were fastened are still to be seen; and the Ruins of a Watch-Tower. The Lagunes are dried up, and the City is surrounded with fruitful Fields. Here is a little round Church whose Roof is made of one Stone, though it is fourteen Paces Diameter, and has a Hole in the Middle to let the Light in. Mr. *Misson* says it is thirty-eight Feet Diameter and fifteen in Thickness. It was a Tomb erected to the Memory of *Theodoric* King of the *Ostrogoths*, and since turned into a Church, now called the *Rotunda*; the Tomb stood upon the Top of it. *Harris*.

Modena, formerly called *Mutina*. About fourteen Feet under Ground there are found the Ruins of a City, over which the present City is built, yet stands upon level Ground.

There

There are Pavements of Streets all of Flint, Stone-works, Floors of Houses and Shops. This City is supposed to have been several Times destroyed, and then lifted up by being built upon its own Ruins. In digging for a Well twenty-six Feet deep, a Hazle-Branch was found with Nuts not corrupted. It is about sixty Miles from the *Ariatick-Sea*, all which Ground is supposed to have been Part of that Sea, because Trunks of Trees, great Bones, Bits of Iron are found at a great Depth. *Atlas, Addison.*

Florence, Lat. 44. Lon. 38. There are Slates digged out of Quarries, on which are naturally drawn divers Figures, representing Clouds, Cities, Animals and Plants, as if Painters and Sculptors had been working upon them. At *Gresham-College* there is a *Florentine* Slate, whereon is naturally represented the Prospect of a City, Houses, Churches and Steeples standing in length; to make them all visible it must be wetted. There is another with the Prospect of a Town lying round upon the Side of a Hill; another with the like Prospect, but shewing it, as at a much greater Distance; another with one half of the Town on a Rock, the other in a Plain. *Dr. Grew.*

In a Cabinet of Rarities there is the *Bononia* Stone, found in the *Appennine-Hills*, remarkable for its shining Quality. There is the *Phosphorus* or shining Stone, which is a Chymical Composition, and shines in the dark like a burning Coal. Mr. *Haac* has made an Experiment.

riment. If this Stone is exposed to the Morning Light a little before Sun-rising, it presents a bright rosy Hue; as the Sun approaches the *Meridian* it advances to a higher and more fiery Complexion, like that of red-hot Iron; a little after Sun-set it declines to a pale Colour, like Mother of Pearl, and at the Light of a Candle it receives a pale luminous Colour. *Dr. Grew.*

There is the remarkable Stone *Amianthus*, that is not combustible, though it may be drawn into Threads and wrought into a Stuff; therefore it is called the *Thrum-stone*. It consists of short Threads or Thrums, about an Inch in Length, as fine as Silk-worm Threads, and very flexible like Flax. Sheets have been made of it, which are cleaned not by washing but by burning them, being not consumed nor diminish'd by Fire. *Septalius* had netted Works made of it. The Name is derived from *α non et μανω*, and it is called *ἀσβεστος inextinguibilis*. There is some of it in *Gresham-College*; it is somewhat like the hard fibrous Part of a large Oyster when it is stewed; here are several Pieces both of white and green. *Dr. Grew, Misson.*

There are Sepulchral-Lamps, which have been shut up in Tombs, and burn continually as being fed with Oil which did not waste, and had incombustible Wicks. These Wicks are made of *Asbestos* or *Amianthus*, which is a sort of incombustible Allum, Tozy like Wool, called *Earth-Flax* or *Salamander's-Hair*. *Tri-*
themius

themius assures us that he made an Oil with the Flower of Brimstone, Borax and Spirit of Wine, that burnt many Years without Consumption. One of these Lamps was found in the Tomb of *Tullia*, *Cicero's* Daughter, in the Time of Pope *Paul III.* which had been shut up there 1550 Years before. *Solinus* tells us that a Light was found in a Tomb, which burnt above fifteen Centuries, and fell into Dust in the Hands of those that took it up. *Collier.*

In the Dukedom of *Florence*, near Mount *Cerbero*, there are small Lakes of vast Depth, from whence Water continually bubbles up to the Height of eight Feet, and falls down again with a great Noise. It sends forth such Steams of Sulphur as kill Birds flying above them; and when Meat is cast into them, it is thrown up again in a Trice, with the Flesh boil'd off from the Bones. In the Duke of *Tuscany's* Garden there are curious Water-works. There is a round Table with a Fountain playing constantly in the Midst of it, the *Samaritan* Woman coming to fill her Bucket, and then returning back again. There are Smiths knocking, Birds chirping and Mills grinding; all done by Water which sets those Engines at work. *Harris.*

The Lake *Como* is thirty Miles long and three broad; at the South-end of it, on very high Land, near the *Alpes* and far from the Sea, there is a Fountain which ebbs and flows three times a Day. There is a famous Cataract in

the River *Velino*, eight Miles from *Narni*. It falls three hundred Foot high into a deep Whirlpool; in calm Weather heard at five Miles Distance. The Water, being dashed against the Rocks, forms a continual Shower like small Rain; and when the Sun shines there is a constant Appearance of a Rain-bow. *Kircher* thinks it has a Communication with *Mons Æolius*, which is near it. There are the Ruins of a large Bridge of admirable Structure and Height, which joins two Mountains; one Arch is yet entire, one hundred and seventy Foot wide; which exceeds the so much celebrated

* At Venice it hath only one Arch 50 Foot wide, 24 high.

Bridge of *Rialto*. * *Misson, Collier.*

Mons Æolius is a Chain of Hills eight Miles long. From the Crannies of these Mountains issue vehement Gusts of Wind, especially in Summer-time, when the Inhabitants bring those Winds by Canals into their Cellars to cool their Wines, and preserve their Fruit; and those of Quality have them so contrived that they let in what Quantity of Wind they please. These Winds blow only in Summer-months, four Hours before Noon and four Hours after, and are more or less strong according to the Heat of the Day. In Winter, if any light thing be applied to the Mouth of these Holes, it is drawn in, instead of being blown out, and with the most Force when the Cold is strongest. The Surface of the Rocks is full of Chinks, into which if any thing is thrown, it makes a great Noise. *Collier.*

St. Marino, a small City and Republick near the *Adriatick-Sea*, twelve Miles from *Rimini*, stands upon the a Top of high and craggy Mountain about three Miles in Length, and nine in Circumference; which includes all their Territories, having four Villages. It is generally hid among the Clouds and cover'd with Snow; when there is clear and warm Weather in all the Country round about it. *St. Marino* purchased this Mountain about the Year 350. He founded a little State, which still preserves its Liberty, and is populous, whilst the *Campania* of *Rome* is almost destitute of Inhabitants. Nothing is a greater Instance of the natural Love that Mankind hath for Liberty, and of their Aversion to an arbitrary Government. *Mr. Addison.*

Palma Nova, in the County of *Friuli*, is the Bulwark of the *Venetian* State towards *Germany*, thought to be the largest regular Fortification in *Europe*. There is a Bridge, in the Middle of which is a Draw-bridge, so artificially made that a Centinel, by touching a small Piece of Iron with his Foot, can draw it as he sees Occasion. This Place is near *Aquileia*, so famous in the Decline of the *Roman* Empire, which was ruined by the *Huns*. *Albano* in the *Venetian* State is five Miles from *Padua*. There are hot Springs arising from a rocky Hill, in one of which the People scald their Hogs to get off the Hair; it is full of white Salt, which coagulates upon the Surface of the Water. *Ray, Harris.*

Venice,

Venice, Lat. 45, 30. a famous City surrounded with Water, which is its natural Fortification. It is said to consist of seventy-two Islands; but most of them are made by Canals, which cross one another, and form several Squares, which are cover'd with Buildings. It is famous for fine Glass, but the chief Ingredient is brought from *Egypt*; it is a Weed called *Kall* by the *Arabs*. They use it for Fuel, and then gather the Ashes, which they beat together like a Stone, and sell in great Quantities to the *Venetians*, who mixing the same with Stones brought from *Pavia*, make thereof the Crystal Glasses. *Sandys*.

Nocera in *Umbria*. *Paulo Boccone* tells us That, at a Village near this City, a poor Man, named *Somareggio*, having buried his Wife, nourished his Child with his own Milk. He applied the Infant to his Pap, which after divers times drawing fetched some Milk; and after a while brought down Milk so plentifully as to nourish it so long as there was need. It has been proved by Experiments that the Paps of Men have the same Structure and Vessels as those of Women; and he concludes that they were not made only for Sight but that Nature has provided, if Need required, to supply the Defect of the Female. *Ray's Wisdom of Providence*.

The same Author hath observed from *Marchetti*, a famous Anatomist of *Padua*, noted for the Education of Physicians, that the Cause of Baldness in Mankind is the Dryness of the Brain,

Brain, and its shrinking from the Skull: For, says he, in all bald Persons, under the bald Part there is always an empty Space between the Skull and the Brain. This Observation gives Occasion to answer a Question, Why does old Age make the Hair white and the Teeth black? The former proceeds from want of Moisture which nourisheth the Hair, and the latter from scorbutick Humour which both decays and colours the Teeth.

Apennine-Mountains. The Snow lies long upon them altho' there is a warm Sun, because the Heat quickly passeth the Air and has no Reflection, as in the Vales and plain Ground. The Clouds hang upon the Top, and sometimes a little below. Mr. *Lassels* passed over them; the Journey was tedious; but, says he, we were diverted towards Night with the Sight of a Fire two Miles distant, which often appears here, especially in cloudy Weather. He saw it for an Hour together of the same Bigness, like the Glowing of a Furnace, of a perfect round Form, not like other Flames. It is a fix'd kind of Meteor, which the People call the *Mouth of Hell*. It had been worth the while to have gone nearer, and given a more exact Account of it.

Lacus Avernus is noted for its noxious Air. There is the sulphureous Grotto *de 'l Cane*, which suffocates any living Creature in a short time. Experiments have been made upon Dogs, from whence it hath its Name. The Creature faints away by Degrees, and recovers again,

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again, if taken out before it be quite dead, and presently thrown into the neighbouring Lake. A Man holds the Dog to the Ground, keeping up his own Head as high as he can, to avoid the sulphureous Steam which is in the Bottom. A lighted Torch burns clear, being held a good way from the Ground; but as it is brought nearer it burns dim; and being held close to the Ground it burns blue and goes out. *Misson.*

Naples, a fine City, Lat. 41, 19. Seven Miles from hence is the terrible *Vulcano* of *Vesuvius*, whose Eruptions are commonly accompanied with an Earthquake; which has reach'd the City of *Naples*, and done much Damage. Mr. *Lassels* went up to the Top, where there is a large Cavity, which we found, says he, much larger than those near *Darlington* in the County of *Durham*, made by an Earthquake. The Orifice of this is near two Miles wide and half as much deep; in the Bottom whereof we saw a new Hill arising out of the Hollow of the old one, emitting constantly a thick Smoak, as if it threatned another Eruption. An Eruption has happened since, and the Hollow now only about one hundred Paces deep, having a Hill in the Middle.

The Ground adjacent to this Mountain is mixed underneath with much Sulphur, which is the Cause of Earthquakes, as before observ'd. There is a Place called *Sulphurata*, a large Piece of hollow Ground fifteen hundred Feet long and a thousand broad, where you see the Smoak of burning Sulphur continually issuing out;

out; and there are divers Vents thro' which the Smoke came out like as out of a Furnace. In the Way to *Puzzuolo*, the high Road smokes as you go along; and there are Chinks thro' which the Smoak issues out: A manifest Sign that the Ground was on Fire underneath, tho' it was not hot above upon the Road. *Misson*.

About five Miles from *Tivoli* there is a Sulphur River, which Mr. Ray and his Company crossed. The Water is of a blueish Colour, and hath a nauseous Smell not unlike that of our Sulphur-Well at *Knaresbrough* in *Yorkshire*. The Channel in which it runs is incruited with a whitish kind of friable stony Matter; which being congealed in many Places in the Shape of Sugar-Plumbs, they call them *Confecti de Tivoli*, and sell them in whole Boxes-full at *Rome*. About *Frescati* they saw growing wild abundance of *Styrax Arbor*, which they found no where else beyond the Seas. This was the ancient *Tusculum* where *Cicero* wrote his *Tusculan Questions*. *Ray, Harris*.

The same Author saith we observed one Thing more very well worth mentioning during our stay at *Rome*, viz. That the Water the Servants brought us in frosty Weather to wash our Hands, was so hot that we thought it had been warmed on purpose by the Fire; which *Phænomenon* having been denied by many of our Modern Philosophers, who were not satisfied with the * *Antiperistasis* of the Ancients, and yet could not give sufficient Reason

* A
strengthening of

any Quality, by its being enclosed and kept in by its contrary, as the internal Warmth is repell'd by external Cold; so Fire scorseth more in a hard Frost, when you approach near it.

son for it, we thought fit to be satisfied of the Truth of it, by making an ocular Inspection into the Fountain it self; and we found the Water of it of an equal Heat with that which was brought us. *Harris.*

A small Warmth may be ascribed to the *Antiperistasis*, such as we find in common good Springs, that smok and are warmish in Winter, yet are cool in Summer, when they proceed from the cold inward Parts into the warm Air; but a great Heat hath not only that Cause, it is of the same kind as Hot Baths, which proceed from sulphureous Veins in the Earth, whereof they had some very large at *Rome*. *Dioclesian's* Baths had Seats for three thousand two hundred Persons to bathe without seeing one another: Those of *Antoninus Caracalla* had one thousand six hundred Seats, all of polished Marble; and the *Thermæ* of *Titus* were very famous, of which the Ruins are to be seen. *Ray.*

It is only a high Degree of Sulphur that produceth Fire itself, and with some concurrent Causes occasions Earthquakes. *Plurs* in *Italy* was destroy'd by an Earthquake, which, instead of casting up, tumbled down a Mountain upon the Town; it is in the *Valtiline* at the Foot of the *Alpes*, now a bottomless Gulph, *April* 26, 1617. The Mountain falling destroy'd one thousand five hundred People, and left no Steps of a Town, but in the Place of it a Lake about two Miles in length. Rich Factors of *Milan* had Seats here, who came

to enjoy the Air and Freedom of the Place: They had Warning of the Earthquake by one who saw the Mountain cleaving, but they laugh'd at him, so that he only escaped, his Daughter perishing with the rest. It seems to have been a Judgment upon a licentious People. *Dr. Burnet, Collier, Ray.*

To what hath been said I shall here add a further Account of the Cause of Earthquakes and subterraneous Fires; the chief Cause consists in Acids, which are as it were the main Spring to other Causes, and set them at work by Fermentation. Acids are Bodies of a longish Figure, very small and sharp-pointed, which penetrate with their sharp Points into other Bodies. Fermentation is a working or swelling with Ferment like Leaven; it is a slow Motion of the inward Particles of a mixed Body, arising from the Operation of some active Acid which exalts and subtilizes any soft and sulphureous Particles.

The Cause of Earthquakes, luminous Bodies, hot Baths, and Spaw Waters may be solved from various Degrees of Fermentation, grounded upon the Principles of Acids and Sulphur, excited in several Degrees; there is a collision or mutual wrestling between an Acid and Sulphur when put together by Nature, and set in a combating Motion: therefore Earthquakes happen when Sulphur meets with a fermenting Acid in the Bowels of the Earth, within some narrow Passages, where the Elasticity of Sulphur is excited, and being pent up
preffeth

presseth upon adjacent Bulks, heaves up like a Mole in its Workings, and causeth a trembling of the Earth.

Elasticity is a Motion like a Spring, whereby most Bodies exert themselves more or less. The Air hath it in a very remarkable manner, and being compressed or moved from its natural State, it endeavours with a very great Force to restore it self; as a Branch of a Tree being bent and let go, returns to its former Place. The * *Atmosphere* is the Region of Air, which encompasseth the Earth, and is now accounted not a distinct Element, but an Effluvium from the Earth, that is, a Body of small Particles which continually flow from mixed Bodies; and those Particles are called *Corpuscular Effluvia*. The Air is a fluid Body, and its Particles are wonderfully united; it acts with an united Power, and its Operation is very mysterious.

* Derived from *ἀτμός* a Vapour, and *σφαῖρα* a Sphere.

The Air hath an united Force as one Body, and a Weight as it were a Pillar from the highest Part to the lowest, by which it presseth upon other Bodies, especially where there is a *Vacuum*: small Bodies do not interrupt it, as the Covering of a House doth not prevent its Power upon the *Barometer*, tho' a general Obstruction of Rain or Wind doth in some measure; it hath also a particular impetuous Force whereby it exerts it self and presseth forward, especially being moved by some other Power: From hence there is a concurrent Cause of Earthquakes when the Air is driven on from wider
Caverns

Caverns into strait Passages, and there meets with Acid Matter; so that the Air it self hath a working, and assists other Matter to shake the Earth about it till each find a Vent, or make their Way against all Opposition.

There is the new *Vesuvius* which the Earth produced *Anno 1538*, and was never seen before; it is three Miles in Circumference: it was raised by an Earthquake that put all the neighbouring Country under great Consternation; the Sea recoiled, many Churches and Houses were either burnt or swallow'd up; a vast Number of Men and Beasts perished by the prodigious Birth of this new Mountain; tho' since it hath not sent forth either Fire or Smoak. The Mountain of *Markle-Hill* in *Herefordshire* was usher'd into the World after a much easier and pleasant manner, because it moved three Days and Nights in an easy Pace, with Houses and Trees for about four hundred Paces. *Misson.*

Puzzoli, the ancient *Puteoli*. Near this Place is the Hill *Solfatara*, which burns continually, and its Exhalations are often smelt at *Naples*; which blacken their Ornaments, and corrupt the neighbouring Waters. The People will positively tell you that its smoaking Holes are actually the Chimneys of Hell. *Capacio* himself is of the same Opinion, and assures us that the *Capuchins*, in the Convent near it, hear often most dreadful Howlings, and are pester'd with *Hobgoblins*. The Sand of *Puzzoli* is much commended by *Vitruvius* and

Pliny, which is used in Building : If it is mixed with a certain sort of Mortar it becomes as hard as Marble, even in the Sea it self. *Misson, Ray.*

On the Coast is *Stromboli*, one of the Islands of *Lipari* ; there is another *Vulcano*, which casts out sulphureous Flames Night and Day, and exhales a Smoak which presages Wind. *Æolus* was King of those Islands, who taught his People to use Sails, and by observing the Smoak of *Stromboli* could foretel how the Winds would blow ; whence the Poets took occasion to feign that he was the God of the Winds. The Inhabitants at this Day know by the Fire and Smoak what Way the Wind will blow ; it sends forth a strong Stench, and renders the Ground about it barren ; yet there are small Parcels that are fertile in all kind of Fruits and Cotton. *Atlas, Collier.*

The Name of *Æolus* is given to a hollow brazen Bowl that hath a very small Hole, by which it sends forth an impetuous Wind when it is fill'd with Water, and made hot standing by a Fire : This admirably discovers that the Wind is a Flux of Air, acted by a more violent Motion, occasioned by the Influence of Heat upon the Vapours, which by its Action produces a great Quantity of new Air that pushes the other violently. *Vossius*, in his Treatise of the Tides and the Winds, ascribes both to the Sun's Heat in general ; but with some particular Observations, which are too much to be here insisted upon : He saith, they who give the

the Reason of the Winds from the brazen *Aeolus* (as *Vitruvius* calls it) or Wind Balls, only prove, that Humour dilated, and flowing out of a larger Space thro' a narrow Hole, moves more swiftly.

He takes his Reason from the Sun's Influence in the *Torrid-zone*, which acts much in the same manner upon the Air as it doth upon the Water. I shall only observe what he saith, p. 147, "We need not enquire whether the Current of the Waters hurry with it the Air that is over it, or that the Motion of the Air moves the Seas, since that the Rays of the Sun being propagated in an Instant, at the same time, tho' not in the same Measure, both Elements receive the Impression." But altho' we reckon many Ways of raising the Wind, yet can we not find where it begins or where it ends; but it will still be a Truth in Philosophy, to which our Saviour compares the secret Workings of the Holy Spirit, *The Wind bloweth where it listeth, and thou hearest the Sound thereof, but canst not tell whence it cometh, and whither it goeth: so is every one that is born of the Spirit*, Jo. 3. 8.

Piperino. There is a little Hill where *Lillies* and *Daffodils* grow naturally in great Plenty, as it may be observed of all sorts of Fruits, that some Country is a natural Mother to one or another; *Arabia* to *Coffee*, sweet Spices and Gums; *Persia* to *Mulberry Trees*; some Parts of *Indostan* to the *Banana*; *China* to *Oranges*; *Sierred Leona* to *Lemons*; where there are vast

Woods of them; and several Countries of *America* to divers fine Fruits, &c. which have been transplanted to other Countries, yet come not to that Perfection which they do in their natural Soil. Sir *Humphry Gilbert* saith that in *Newfoundland* Nature it self produceth Corn: In the *Midland*, Lat. 50, where there was no People, he saw Corn in a manner bearded, and *Strawberries* springing up in the Woods.

Near *Piperno* there are sandy Hillocks cover'd with various sorts of ever-green Shrubs; and there is abundance of Cork Trees much resembling an ever-green Oak, and may be reckon'd a kind of Oak, because they bear Acorns; but this Tree has this peculiar Quality, that the more you strip it of its Bark the stronger it grows, and produces immediately a new one. Near the little City *Mayenca* there is a Lake, the Waters thereof rise considerably two Days before Rain. *Otranto*, part of the ancient *Calabria*, is subject to Locusts; but there is a sort of Birds peculiar to this Country which devour them. The Town is forty-five Miles from *Brindisi*, the ancient *Brundisium*, which is noted for the Death of *Virgil*; and was the famous Port from whence they pass'd out of *Italy* into *Greece*. Lat. 40, 30.

The *Obelisks* of *Rome* are remarkable Works of Man's Labour and Vanity, as well in the erecting such vast Piles as in bringing them from *Egypt* to *Rome*; they are Stones of huge Bulk, ending in a sharp Point, of *Granite*, a kind

kind of very hard Marble, which will resist Fire for a considerable time. They are adorned with Hieroglyphic Characters, which contain the Secrets of Divinity, Astrology, Magick, &c. the Sciences in Vogue among the Egyptians. They resembled the Rays of the Sun, the chief Divinity adored under the Name of *Osiris*, and stand upon square Pedestals, over and above which the biggest of them is an hundred and eight Foot high, and has stood three thousand Years, that of *St. John Lateran*; and that of *St. Peter* is nine hundred Years older, and weighs 956148 Pounds. The Weight might be guessed at by knowing the Burden of the Vessels, which were large Frames made on Purpose to bring them.

Villa Ludovisia near *Rome*. Among some Curiosities Mr. *Misson* was shewed some Bones, which, says he, they would make us believe were the Skeleton of a petrified Man, but they were only covered with a stony Crust; not but that I believe Bones to be capable of Petrification as well as other Things, having in my Travels seen great Variety of petrified Bones, Fishes, Fruits, Flowers, Trees, broad Pieces of Flesh, and Animals of all Sorts. *Paræus* tells of a whole Child petrified in the Mother's Womb; and *Kircher* relates of the Town of *Benedobolo* in *Africk*, that it was petrified in one Night, with Men, Beasts, Trees, and every thing that was in it. *Misson*.

Aquileia, Lat. 46. was famous formerly; now a small Town in the Dutchy of *Carniola*,

of which the Capital is *Laubach* or *Naupaetus*. The *Romans* carried their Stores to *Aquileia*, and from hence by Land to *Nauportus* above forty Miles, then by the River *Save* down to the *Danube*, for the Use of their Forces in those Countries. When the Tyrant *Maximin* besieged this Place, the People wanting Bow-strings, out of their Fidelity to the *Romans*, cut off their Wives Hair to supply that Defect; in Memory of which Action the *Romans* built a Temple, and dedicated it to *Venus the Bald*. Collier.

Genoa is situate under high Hills that join to the *Appennine*, Lat. 44. and hath a small Territory along the Sea-side. It was the Country of the ancient *Ligurians*. *Conrad III.* Emperor, *Sigonius* says, gave the *Genoufes* the Privilege of coining; and other Authors add that he besieged the rebellious Town of *Veinsburg*, and having reduced it to great Extremities, he would only grant that the Women should go out with what they could carry on their Backs, designing to keep the Men Prisoners; but the generous Women, instead of loading themselves, as expected, with their best Moveables, took their Children in their Arms, and their Husbands on their Backs, and so marched out. This Sight so pleased the Emperor that he pardoned all together. Collier.

Spinello, a famous Painter in *Tuscany*, at the latter end of the fourteenth Century, drew a Picture representing the Rebellion of the Angels, and how they were cast headlong into the

the Abyſs of Hell. He painted *Lucifer* in the Form of a monſtrous Beaſt, extremely frightful and horrible. Some time after, as he was aſleep, he thought he ſaw the Devil in the hideous Figure he had painted him; who demanded where ever he had ſeen him ſo deformed, and why he had ſo repreſented him. He awaked at the Fright, with a ſtrange Trembling all over his Body, the Horror being ſo great that he had like to have died of it; and from that time he had always a wild frightened Look and a weak Head; and lived not long after. He was then ſeventy Years of Age. *Felibien, Collier.*

The Loadſtone is found in *Italy* in the Iron Mines, alſo in *Germany* and *England*; a wonderful Work of Nature, and a Secret not be found out. The admirable Properties of the Loadſtone, ſo far as yet diſcovered, are thoſe, that it attracts Iron, or any ſmall Body that hath Iron in it; and gives to Iron the ſame attractive Power, but hath no Perception of any other Body tho' never ſo light. It communicates to Iron a *Verticity* or Turning to the North-Pole; in which lieth its great Uſe as to Navigation, altho' there is often a Variation of the Needle; but from that Variation Time may produce further Discoveries in Astronomy. There is a large one in *Greſham College* that was found in *Devonſhire*; and ſome other great Pieces, and twenty-ſeven ſmall ones. *Dr. Grew.*

Leghorn in *Tuscany*, Lat. 43, 20. This is the *Portus Liburnus* of the Ancients. Here is the *Marking Stone*, in filing of which many Workmen are employed, and of the Filings they make Powder for Hair. Mr. *Ray* embarked here on board a *Dutch Ship* for *Naples*. It was observed that the Wind generally followed the Course of the Sun; and the Captain assured them that when they make a Voyage to the *West-Indies*, they sail up as high in the South of *Africk*, as the Place lies whither they are bound, and then steer Westward, the Wind blowing constantly from the East, and the Sea running the same Way; but returning they go far to the North, and so pass over to *Europe*, which, says he, much strengthens the Opinion of the Diurnal Motion of the Earth. *Ray*, *Harris*.

* The lowest Region of the Air toucheth the Earth, and is bounded by the Reflection of the Sun-Beams; the middle Region reacheth from the Tops of the highest Mountains to the lowest Region.

The same judicious Author observes that on the North-side of the *Appennine Mountains*, there was Snow on the low Grounds, and the Air cold like Winter, when it was warm on the other Side, and the Snow melted some time before. The Reason, he thinks, is to be attributed to the Height of the Ridge, which reaching beyond the lower * Region of the Air, hinders the Mixture of the Southerly Air with the Northerly, and stops the free Passage of the Winds, which would carry the warm Vapours into the other Part; in the same Manner as Travellers relate of a Ridge of Mountains in the *East-Indies*, on the one Side whereof

whereof it is Summer when it is Winter on the other Side. *Ray, Harris.*

Padua. *Santorius*, a Professor of Physick in that University, after a long Study of Nature, learnt that the Superfluities of Food being retained in the Body, were the principal Causes of all Diseases; and that a free Transpiration through the Pores was the greatest Help in this Case that Physick could afford. He wrote a Treatise upon it, wherein he shews that this Transpiration is so necessary, that it is in a Manner impossible without it to restore Health: Forasmuch as this Way being stop'd, the Humours which should have exhaled through the Pores, become corrupted; and that almost all Diseases proceed from this Putrification, which is not only imparted to the Spirits but also to the Blood, and all the inward and outward Parts of the Body. He says that if a Man eats and drinks eight Pounds in a Day, he would transpire five of them in due Course. *Memoirs de Temps, Collier.*

Tarentum. From hence the *Tarantula* takes its Name, a very pernicious Creature. Those that are bit with it fall into a kind of Madness. They make a thousand odd Gestures, weep, dance, laugh, tremble, swoon away, and die in a few Days if not succoured in Time. It is very like a Spider, but much larger. The Cure is said to be Musick; but it is the Motion which the Man hath in dancing, to which he is inclin'd by the Distemper, and more elevated by the Musick. *Mr. Sandys* tells of one
cured

cured without Musick, upon the Sight of a Judge in his Robes, which put the Man into a Fit of dancing; and that expells the Poison by sweating. *Atlas.*

Rimini, the old *Ariminum* upon the River *Rubicon*; and five Miles West is *Cesena* on the same River, where there is yet a Stone with an Inscription, containing a Decree of the Roman Senate, forbidding any Soldier to pass the *Rubicon* without their Consent upon Pain of Treason; a sufficient Proof, says Mr. *Lassels*, that the River now called *Pisatello*, is the ancient *Rubicon*, which *Julius Cæsar* passed over contrary to the said Decree. This was a Place of good Trade; but now the Sea is retired from it, as it hath from other Places, especially above *Venice*, about which there was more Water than at present in the Place called the *Lagune*. *Lassels, Atlas, Harris.*

In the *Mediterranean-Sea* Coral is found, as in the *Baltick* and other narrow Seas, but none in the Ocean. There are eight or nine Fisheries among the Rocks, no where above forty Miles from Land, three upon the Coast of *Sardinia*, two upon the Coast of *France*; *Sicily*, *Catalania*, *Corfica* and *Majorca*, have each one. Of the Nature and Generation of Coral Mr. *Boyle* affirms that whilst it grows it is often soft and succulent, and propagates its Species. *Kircher* was informed by the Divers, that the Coral would sometimes let fall a spermatick Juice, which lighting upon any steady Body,

grows.

Body, would thereupon produce another Coral. Dr. Grew.

In the *Adriatick* there is an uncommon Tide. The Flux and Reflux increases or decreases according to the Distance from the Extremity of the Gulph. For at *Venice* the Tide rises about four Foot, near *Ravenna* to three, at *Pesara* two, and scarce above one at *Ancona*, till at last it comes to nothing. Mr. *Misson*. From *Ancona* to *Venice* the Tide comes in very sensibly at its stated Periods, according to the Course of the Moon, but rises more or less in Proportion as it advances near the Head of the Gulph. *Lucan* has gone out of his Way to describe this *Phænomenon*, and accounts it very mysterious. *Addison*, p. 86. This Tide is indeed regular; but if the Moon is the Cause of it, why does not the same Influence affect the wider Sea adjacent, the *Ionian Sea*?

The Sea about *Naples* has no sensible Flux nor Reflux, yet is so deep that a Vessel of Burden may come up to the *Mole*. At *Sidon*, where is the Height of the *Mediterranean*, there is a regular Tide, but so small it is scarce discernible. *Euripus* is an Arm of the *Archipelago*, between *Achaia* and the *Negropont*. This Arm or River flows regularly the first eight Days of the Moon, but after that very strangely, viz. eleven, twelve, thirteen and fourteen times in twenty-four Hours. Into this River *Aristotle* is said to have cast himself, because he could not find out the Reason of the Tides. How should the Moon cause this Variety, or have

have such Power at such a distance? I doubt the Moon can no more send down such an Influence than the Season-Birds can fly up into the Moon.

There is a vast Variety of Tides, and it is all over wonderful. In the North, at *Button's Isles*, at the Entrance of *Hudson's Strait*, and *Resolution Island* on the other Side, the Tide flows at Seven and a half upon the *Change-Day*, and riseth three Fathoms. The Flood comes from the Eastward and thither returns. It is very mysterious how the Tide ariseth, and from whence it comes, since in some Places Eastward there is no Tide; as at *Nova-Zembla* and *Spitsbergen*, little on the Coast of *Norway*, none within the *Nase* of *Norway*, nor in the *Baltick* tho' a large Sea; whilst in *Adria* a much less Sea, there is a Tide within and none without. Why does not the Moon cause a Tide in one Place as well as another, and why in such a different Manner in divers Places?

God hath indeed set Lights in the Firmament, to be for Signs and for Seasons; the Sun to rule the Day, and the Moon and Stars to govern the Night. The Moon is also an Index to the Tides; but it doth not from hence follow that it is the Cause of them, no more than that the Sea causeth the Moon at the Change to retire from the Sun and to appear later every Day. I would rather incline to *Vossius's* Opinion that the Sun in his Course near the *Line* dilates the deep Waters, and causes the Sea to move with a Descent towards the

the Shore. But I chuse rather to resolve it into Providence, *For God's Way is in the Sea, and his Footsteps are not known. The Voice of the Lord is upon the Waters; it is the Lord that ruleth the Sea.* Psal. 77, 19. 29, 3.

Greece, Morea or Peloponnesus. In *Arcadia*, on the West-side of the *Peninsula*, is the famous *Styx of the Poets*, a small River which runs into the River *Alpheus*. It gave Occasion to the Poetical Fiction, because its Water is so cold, and of so corroding a Nature that nothing but the Hoof of a Mule is able to contain it. *Lavadia* is the ancient *Achaia*. There is a large Lake surrounded with Hills, from which it is constantly supplied with Water in such Abundance that it would overflow the Country; but to prevent this there are above forty wonderful subterraneous Passages hewn out of the firm Rock, and that quite under a huge Mountain, to let the Water have a Vent and give it a proper Passage into the Sea. *Atlas*.

Scio, formerly called *Chios*. There is Abundance of excellent Wine; and that about *Ariusa* exceeds all others in Deliciousness of Taste; and from the Vineyards of *Mesta* the Ancients had that which they called *Nectar*. The Claim of the Town of *Chios* to *Homer's* Birth is the most probable, where his Descendants lived, who were called the *Homerides*; and in the *Ariusian* Fields was his House, where they say the *Nectar* elevated his Genius. *Santorini*, formerly *Ithera*, is near the *Cyclades*; where Port *St. Nicholo* has no Anchorage, the Bot-
tom

tom being never yet found by any Plumb-line. At the Mouth of it are several Islands that were raised out of the Sea, and one no longer ago than 1707. *Atlas.*

Rhodes. The *Colossus*, one of the seven Wonders, was the Figure of a Man striding over the River, made of Brass, eighty Cubits high. The distance between one Foot and the other was above a hundred Yards, so that Ships easily passed between its Legs; and two Men could scarce fathom one of its Thumbs. It was made by *Chares* of *Lyndus*, in twelve Years, at the Expence of 300 Talents *. *Mavi*, Sultan of *Damascus*, broke it, and sold it to a Jew for 200 l. Sterling; who loaded 930 Camels with the Brass of it. In one Hand it held a Javelin pointing to the East, and in the Breast was a Mirror, in which the Inhabitants could descry Ships at a distance. *Herbert.*

* An Attick Talent is 193 l. 15 s. at 5 s. per Ounce, being 56 lb. 11 Ounces. 17 $\frac{1}{7}$ Grains.

Candia or *Crete-Island.* *Candie* the chief City, Lat. 35, 40. Nigh the Source of the Brook *Lene*, to the North of Mount *Ida*, is a Grotto cut out of a Rock, which is said to be the Labyrinth of *Minos*, made by the Direction of *Dædalus*. The Goats of *Candia*, being shot with an Arrow, do chuse out from many Simples the Herb *Dittany*, and therewith cure themselves. *Cyprus* has Cotton-Wool the best in the East. The Inhabitants catch a vast Number of Birds of the Size of Larks, which frequent the Hills; they pickle them, and send a thousand Barrels in a Year to *Venice*. *Famagusta* is the chief City, Lat. 34. *Atlas.*

Nicosia

Nicosia in *Cyprus* being taken by the *Turks*, the General *Mustapha* had ordered the chief of the Riches to be put on board three Galleys for a Present to the Grand Turk *Selimus*; when a Lady of that City being a Prisoner in one of the Galleys, most desperately set Fire to the Gun-powder, which blew up that Galley and beat the other two in Pieces, whereby she destroyed herself, a vast Number of *Turks*, and an immense Quantity of all kind of Riches.

Scanderoon, a Port at the end of the *Mediterranean*. Here they send Letters by a Pigeon. When a Vessel comes from *Christendom*, the Vice-Consul of the Nation immediately gives the Consul at *Aleppo* Advice of it, by sending a Pigeon with a Note tied under the Wings, which will carry it in four or five Hours, tho' it be two or three Day's Journey on Horse-back. *Ricart, Tavernier, Averil.*

Greek-Fire. It was invented in the seventh Century by *Callinicus*, by whom it was successfully employed against the *Saracens*. He destroyed many of their Ships and killed 30000 Men. This Fire had an extraordinary Quality of burning brisker in the Water, and diffusing itself on all Sides, according to the Impression given it; nothing but Oil, which nourishes other Fire, would quench it, or a Mixture of Vinegar, Urine and Sand. It was composed of Sulphur, Naptha, Pitch, Gums, Bitumen, and other Drugs. They blew it out of long Tubes of Copper, or shot it out of Cross-bows, or other Spring-Instruments. *Maimbourg, Collier.*

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Let us return to *Turkey* in *Europe*. I do not find here any uncommon Works of Nature, and there are few other Remarkables. *Bender* is Capital of *Moldavia* upon the *Neister*, Lat. 46. whither the late King of *Sweden* fled after he was defeated by the *Czar*. In this Country the *Danube* falls into the *Black Sea* by five Mouths. *Sentines* is the ancient *Athens*, famous for the Learning of ancient Times, Lat. 38. In the Country there is an Olive Wood fix Miles long, in a Plain upon the River *Cephisus*. There is the *Tanari* or Lanthorn of *Demosthenes*, whither he retired to study in private. It is a small Marble Tower with fix Columns round it, and a Lamp with three Branches over the Dome which covers it; whence perhaps it was called the *Lanthorn*. *Atlas*.

Corinth, Lat. 37. It was destroyed by the *Romans* under *Lucius Mummius*. It cannot be imagined what Wealth was consumed by Fire at the taking of it. It is enough to observe that the famous Metal called the *Brass of Corinth* was but the Remains of that great Conflagration. The Fountain *Pirene*, which the Poets say *Pegasus* drank, is on the Top of a Rock, where is now a Castle; and there are 200 Wells or Cisterns in it. On the West-side of the *Isthmus* of *Corinth* is the Bay of *Lepanto*, where the *Christians* obtained a Victory over a mighty Navy of the *Turks* Anno 1571, Oct. 7. In the same Place *Augustus Cæsar* defeated *Anthony* and *Cleopatra*. *Rycaut*.

Dalmatia,

Dalmatia, over-against *Italy*, Part of the ancient *Illiricum*. When the *Turks* invaded this Country, and had taken several Places which then belong'd to the *Venetians*, *Curzola* was preserved by an Accident worth admiring. *Anthoni Contaren* the Governor, afraid of the *Turkish* Power, fled out of the Town the same Night that the News came of the *Infidels* Approach, and was followed by all the Townsmen, whose Wives being left alone they shut the Gates and mounted the Walls, where they with Fire, Stones and such other Weapons as they had, kept off the Enemy until a providential Storm arising, began to toss and scatter their Gallies, which the Assailants perceiving, gave over the Assault, and went on board their Fleet, to the great Joy of the weak Defendants. *Rycaut*.

Thessaly, and *Macedonia*, and the Parts adjacent. *Larissa*, the capital City of *Thessaly*, seated by the River *Peneus*, has to the North the famous Mountain *Olympus*, and to the South the Plains of *Thessaly*. Here the Grand Seignior has a Palace and kept his Court several Years. The Summer being very hot 1669, the Grand Seignior retreated for two Months to Mount *Olympus*, to enjoy the fresh Air, whence he had a Prospect of the *Ægean-Sea*. This Removal proved destructive to a great many People, who being over-heated with ascending so high a Mountain, were so struck with the sudden Alteration of the cold Air that they died soon after; especially such as had drunk

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of

of a Spring of a whitish Colour, who were immediately seized with a Coldness at the Stomach, and died in three or four Days. Dr. *Brown*.

The ancient *Greeks*, saith he, (the best Romanizers in the World, especially when they speak of their own Country) will have *Olympus* to reach beyond the Clouds, and therefore have assigned to *Jupiter* and the Gods their Residence thereabout. I am sure I saw the Clouds above it, and to me some Parts of the *Alpes* appeared much higher; and in *September* there was no Snow upon *Olympus*, whereas the highest Peaks of the *Alpes*, *Pyrenæan* and *Carpathian* Mountains, besides several others in *Europe*, are never without it. This Mountain consists not of one high rising Peak, as some describe it, but of a long Ridge of Mountains. Its Extent from East to West makes the Inhabitants at the Foot of the North and South-sides as sensible of the Difference of the Air, as if they lived in a very different Climate; which makes good the Words of *Lucretius*,

*Nec metuens imi Borean habitator Olympi,
Lucentem totis ignorat noctibus Arcton.*

The River *Peneus* ariseth from Mount *Pindus*, which passing by *Larissa*, and being augmented by other Rivers of *Thessaly*, comes into the famous Vale of *Tempe*; and from thence, between Mount *Olympus* and *Ossa*, exonerates itself into the Sea. How fruitful this Country

try was, the wintering of that vast Army of *Xerxes* under *Mardonius* is an undeniable Testimony; and it continues so to this Day. For tho' there is a vast Concourse of People at the Time of the Sultan's Residence here, every thing is so cheap that one may dine at a Victualing-house, with roasted and boiled Meat and Sherbet, for Six-pence a Head. *Dr. Brown.*

Mount *Hæmus*, *Cliffura* is a part of it. Our Eyes, says the same Author, were surprized with the Brightness of the Rocks, which consisting of *Muscovia-Glass*, * made a pleasing glittering Show, like that in *Persia* mention'd by *Olearius*, the *Lapis Specularis*, which shin'd like Diamonds. The whole Ridge of Hills is a Part of *Hæmus*, which under divers Names reach from the *Adriatick* to the *Euxine-Seas*. The high and craggy Mountains of *Pyrlipe* glister like the *Cliffura*. There are, in some Parts of these Hills, massy Stones lying upon one another, as if laid with Hands, without the least Earth about them.

* See *Muscovy*, where that bright Stone is called *Slude*.

Filurina in *Macedonia*. In coming to this Place down a Hill, there is a Prospect of *Olympus*, although seventy Miles distant; and on the left, of two Lakes, one whereof was made by the removing of great Stones out of the Side of the Hills, whereby Vent being given to the subterraneous Waters, they broke out into the adjacent Plains. The River *Pharibus* comes from under a rocky Mountain not in small Springs, but in one continued Channel, and joins with *Peneus* at *Larissa*. This very

large Spring could not be maintained by Rain, and must needs have its Original from the Sea.

Skopia, the *Scupi* of *Ptolemy*, is a large City, in which there are above seven hundred Tan-ners, who make most excellent Leather. Near this Place there is a most noble Aqueduct of Stone, from one Hill to another over the ad-jacent Valley; it has about two hundred Arches, and is a noble Piece of Antiquity. In the Court-yard of the House of an *Emir*, one of *Mahomet's* Kindred, there is a Fountain built like an old Castle with Towers, out of the Tops whereof the Water springs. This City is seated on the Frontiers of *Mæsia* and *Macedonia*; and hereabout has been the Field of great Actions in the *Roman* times, where *Regillianus* did such mighty Feats that he de-served a Triumph. *Dr. Brown.*

This Country has been famous in ancient Times, not only for the Battles fought in the Plains of *Thessaly*, but also for having produced many great Men; and *Hippocrates* the Father of *Physicians* lived and practised here, and died about *Larissa*, being buried betwixt this Place and *Gyrton*. Here are very large and delicious Figs, and most delicious Water-Melons. The Gourds in the Hedges, with their large yellow Flowers; divers sorts of green Thorns, and ever-green Oaks, make the ways exceeding pleasant. Here is Plenty of fine yellow and black Tortoises, which are good Meat; but the *Turks* laugh at the *Christians* for eating them, when they have such plenty of Mutton.

The

The Tortoise having eat of a Viper, seeks for wild Marjoram to purge herself. *Ha ris.*

The Wine of this Country is rich, but has a resinous Tange or Taste like Rosin. Their Onions exceed ours, not only very far in Bigness, but also in Taste, being sharp and pleasantly pungent upon the Tongue, without any offensive Smell. The *Turkish Chiaus*, who was Guard to Dr. Brown, and had travelled almost through all the *Turkish* Dominions, told him that the Onions of *Ægypt* only exceeded those of *Thessaly* in Goodness; which was the first time, says he, I really understood that Passage in the Scriptures, of the *Israelites* longing after the Onions of *Ægypt*. The other agreed very well with his Stomach, tho' he never used to eat Onions before. Dr. Brown.

The same Author, observes whilst he was in *Thessaly*, that the Season was so dry that the great Rivers were low, and the small ones quite dry, except one, about seven Miles from *Tornovo*, which flowed plentifully with one continued Channel from under the Rocks; and this, like the River *Pharibus*, had a greater Supply from the Sea. He ascribes *Deucalion's* Deluge to the stopping of the River *Peneus*, into which most of the others run, whereby the whole Country of *Thessaly*, being plain and enclosed with Hills, was laid under Water for a whole Winter. I know, says he, some are Opinion that whole *Thessaly* was in most ancient times under Water, till the Mountains *Ossa* and *Olympus* being torn asunder by a violent Earthquake,

the River *Peneus* forced its Passage by *Tempe* into the Sea. *Harris*.

Cassova in *Bulgaria* is noted for great Actions, tho' not much larger than *Lincoln-Heath*; some take it to be the *Campus Merulae*. Here it was that *Lazarus Despot* of *Servia*, at the Head of five hundred thousand Men (the greatest *Christian* Army that ever was brought into the Field) was worsted by *Amurath*, and he slain in the Fight. Nor was he long survived by *Amurath*, who was slain by *Michael Cobilovitz*, a *Christian* Soldier, as he was viewing the dead Bodies. This Man was lying among the Dead, and suddenly starting up stabbed *Amurath* with a short Sword which he had under his Coat; whence the Place is called the *Field of the Sepulchre*, where a Monument is erected to the Memory of *Amurath*. Dr. *Brown*, *Ricaut*.

Dr. *Brown* came to *Labach* in *Carniola*, Lat. 46, supposed to be the ancient *Nauportus*, famous for the Landing of the *Argonauts*. These *Grecians*, under the Conduct of *Jason*, sail'd from *Argos* in *Thessaly* to *Colchos*, on the East-side of the *Euxine-Sea*. The King of *Colchos* having sent out some Ships to pursue them, they steer'd Northward, enter'd the *Danube*, and passing up that River till they came to the Confluence of that River with the *Save*, they went up the River *Save*, and so the River *Labach*, till they landed at this Place, called then *Nauportus*, from whence they returned by the way of the *Adriatick-Sea* into *Greece*; so
that,

that, says he, I had been near the Place of their setting out in *Theffaly*, and at their Landing-place in *Carniola*. It is nine German Leagues from *Trieſte*, the Port at the Head of the *Adriatick*, belonging now to the Emperor of Germany. *Harris.*

The Ship was called *Argo* from the Place, and the Men from the Ship *Argonauts*, who went upon this Expedition *Anno Mundi* 2714, about three Years before *Jephtha* judged *Israel*, and forty-two before the Siege of *Troy*. Some ſay the *Golden-Fleece* was nothing elſe but the vaſt Riches of the Country, there being much Gold in the Rivers that ran from Mount *Caucasus*; and becauſe they uſed Sheep-skins with the Wool on to take up this Metal with the Sand, it gave Occaſion to call them *Golden-Fleeces*. Others think it was a Fable of the Fleece, to ſignify Honour and Glory, and to invite young Men to glorious Atchievements. *Apollonius.*

In thoſe Parts above-mentioned is *Carinthia*, a Province belonging to the Houſe of *Austria*, and bordering upon *Tyrol*, lying partly upon the River *Drave*, South from *Saltzburg*. The chief Town is *Clagenfurt*, Lat. 46, 50. *Æneas Sylvius* ſays that in his Time they uſed to hang a Man immediately if he was violently ſuſpected of Theft, and tried him three Days after; if found guilty, they let his Body hang till it rotted; if otherwiſe, took him down, buried him at the publick Charge, and prayed for his Soul. At that time they were a free State, go-

verned by a Duke whom the Boors chose; and when he was elected, a Boor standing behind his Back hit him a Box on the Ear. *Atlas, Collier.*

Ragusa, a small Republick in *Dalmatia* upon the Gulph of *Venice*, supposed to be the ancient *Epidaurus*, Lat. 40, 43. They put themselves under the Protection of the *Turks*, and pay a Tribute to the Grand Seignior; but they have a free Government; and though the Country is barren, yet the Inhabitants are rich, having a good Harbour, and the best Trade of any on that Coast. Dr. *Brown* lodged a Night at *Procupie* at a Merchant's House of *Ragusa*, and had good Accommodations. Here, says he, we met with a *Roman-Catholick* Monk who spoke *Latin*, a Rarity in those Parts. *Atlas.*

Here he observes the State of Religion. Before I travelled, says he, into these Parts, I could never conceive that the Eastern Countries contained such vast Numbers of *Greek Christians* (who do not own the Pope's Authority) as are to be found in *Greece* and the *Greek Islands*, in the *Turkish* Parts of *Dalmatia*, *Croatia*, *Rascia*, *Bosnia*, *Thrace*, *Persia*, &c. besides the vast Dominions under the *Czar of Muscovy*; which put me in mind of what a learned Author says upon that Head, That if a true Computation were made of the *Greek Christians* in *Europe*, they would far exceed those of the *Roman Religion*. *Harris.*

The same Author went from *Labach* or *Nauportus* to see the famous Lake of *Zirnitz*, which is before-mentioned; and here I shall add his Account. When the Water is gone away, the Ground is divided into several Hills and Vallies. I myself, says he, passed over five of the Vallies, and saw a remarkable Stone called the *Fisher's-Stone*, because, by its Appearance, they know when the Water begins to retreat. Upon the most exact Enquiry I could make, I could not find that this Lake had failed one Year to descend and ascend again, or how long it was since this Property had been first observed. If my Conjecture fails me not, it is the *Lugea Palus* of *Strabo*, [who, notwithstanding this, as well as all other ancient Geographers, makes no Mention of this surprizing Quality. *Harris*.

From hence he went to the Quick-silver Mine of *Idria*, a wonderful Product of Nature. This Mine affords two sorts of Quick-silver, one called the *Virgin Quick-silver*, which discovers itself without the Assistance of Fire; and is either found in the Earth, or Ore naturally as it is, or falls in small Drops, or sometimes streams out in a considerable Quantity down into the Mine. Thus seven Years before, they had such a Stream coming from the Earth, which at first was as small as a common Thread, and afterwards as big as a good Packthread; but did not continue for above two or three Days.

The

The *plain Quick-silver* is that which being not at first perceivable to the Eye, is forced by Fire either out of the Ore, or native Cinnabar of *Mercury*, which they dig out of this Mine. He descended this Mine by the Pit or Shaft of St. *Agatha* by Ladders, and came up again by that of St. *Barbara*, an Ascent of six hundred and thirty nine Staves or eighty nine Fathoms. He saw the Laboratory, where the Quick-silver is separated by Force of Fire; sixteen thousand Retorts of Iron, each of which costs a Crown at the Iron Furnaces in *Carinthia*. They employ at once eight hundred Retorts, with as many Recipients, for the drawing over the Quicksilver in sixteen Furnaces, fifty Retorts in each, *viz.* twenty five on a Side, twelve above and thirteen below on each Side. *Harris.*

At *Chremnitz* there is a Gold-Mine which has been work'd in near a thousand Years. It is nine or ten Miles in Length, and has one *Cuniculus* or Horizontal Passage, called the *Erb-stall*, of eight hundred Fathoms in Length, its Depth being at least one hundred and seventy Fathoms; into which they do not descend by Ladders, but are let down in Seats of Leather, fastned to the End of a Cable by the gentle turning of a Wheel, to which the other End of the Cable is fastned. This Mine has six perpendicular Pits or Shafts, having particular Names. I went down (says the Author) by that of *Rudolphus*, one hundred and eight Fathom deep, and was drawn out again by *Leopold's* Shaft, in a strait Line above one hundred

dred and fifty Fathoms; a Height surpassing that of the *Pyramids* by a third Part.

Athos, ninety Miles South-East of *Thessalonica*. This Mountain is above the middle Region; and the Shadow in the Evening extends as far as the Isle of *Lemnos*, which is seventy-eight Miles. *Xerxes*, invading *Greece*, caused it to be dug through, to make a Passage for his Ships a Mile and a half in Length into another Bay. The *Greeks* have built twenty-three Monasteries upon it, because it is so very healthful that they frequently live one hundred and thirty Years. The neighbouring *Caridians* in *Romania*, by Reason of their Temperance, are free from many Indispositions to which other Nations are subject. Being in the *Turks* Dominions, this is one Benefit of their Poverty, a good Health. When an hundred Years old they commonly beget Children, and have no grey Hairs. *Atlas*.

Romania is the ancient *Thrace*; *Adrianople*, so called from the Emperor *Adrian*, was the old *Oreſta*, one hundred and thirty Miles N. W. of *Constantinople*, Lat. 43, 5. The *Turks* took it in 1362, and made it the Seat of their Empire. There six Kings reign'd successively, till *Mahomet the Great* took *Constantinople*, and then took the Title of Emperor. During the Siege, the Mouth of the Haven being secured, he brought Part of his Fleet eight Miles over Land, out of the *Bosphorus* behind *Pera*, viz. seventy of the lesser Ships and Gallies, by which means he possessed the Harbour, and assaulted

faulted the City on that Side. It was taken by Storm, when the Defenders crowding thro' a Gate, the Emperor himself, with eight hundred more, perish'd in the Press. *Rycaut. Anno 1453.*

* ΝΑΥΤΗΣ
ἡπειρος,
πεζοπό-
ρος πελά-
γος.
Nauta
Terræ,
Pedester
Maris.

Such a like notable Exploit the *Venetians* performed in the *Lake de Garda*, when they brought their Gallies hither out of the *Adriatick-Sea*, and engaged in a naval Combat against *Philip Visconte*, General of the Forces of *Milan*, a much longer way than the other: But here again in the *Propontis* there was a much greater Work; * *Xerxes*, instead of carrying his Ships over Land, made dry Land of his Ships, that is, he joined them cross the narrow Sea, and led his Army as it were upon dry Land; at *Athos* he turned Land into Sea. He invaded *Greece* with a Million of Men, and was beaten by ten thousand *Grecians*; he came with ten thousand Ships, and fled in a small Cock-boat; an eminent Example of the Fall of Pride, and the Uncertainty of human Greatness! *Archipelago* is a Name given to a Sea, in which there are many small Islands; the most noted is that between *Greece* and *Asia*, at the Entrance of which *Candia* is situate. One of those Islands is *Lemnos*, between *Thrace* and Mount *Athos*, now called *Monte Santo*. There is a certain Earth called *Terra Sigillata*, famous for healing Wounds and expelling Poison; which yields a great Revenue to the Grand Seignior. *Negropont* is a *Peninsula*, wherein the Mountain *Caristo* is famous for its excellent

lent Marble, and the Stone *Amianthus*, where-
of they make a kind of Linnen; which has
been before mentioned. *Atlas.*

On the *Archipelago* there was Earth rained,
upon the Eruption of Mount *Vesuvius*, Dec. 6.
1631. There are two Parcels of it kept in
Gresham College, the one is gritty and of the
Colour of *Amber*, the other a soft Bole and
looks like powder'd *Jalap*. This Earth be-
gan to rain about Ten of the Clock at Night,
and continued till Two next Morning; so that
it lay two Inches thick on the Deck of Capt.
W. Badily's Ship, who sent this Relation.
Whilst it rained no Wind was stirring; it fell
in several Parts a hundred Leagues distant:
There is another Parcel that was lately rained
upon the Mountain *Tenariff*, of a pale Clay
Colour, and insipid; yet upon the Affusion of
Oil of *Vitriol* it makes a sudden Effervescence.
Dr. Grew.

In this Sea the *English* Ambassador, the Earl
of *Winchelsea*, had a great Deliverance; he
was sent from King *Charles II.* Anno 1661.
The Ship struck upon a Rock, the Sheathing
and false Keel struck off, much Water came
into the Hold; however the Storm abating
they got off, and by the Sullage and Weeds
which the Leak had suck'd in, the Ship became
tight: But when she came into *Woolidge*
Dock, a great Piece of the Rock was found
struck into the Bilge of the Ship, and as close
and strongly fix'd as if it had been riveted in;
which seemed so wonderful a thing, that the
Ship-

Shipwrights reported it to the King, who came to *Woolidge* on purpose to see it, commanded it to be cut out, and kept it in his Closet as a Rarity.

This Ship, only a third Rate of sixty Guns, was a Wonder to the *Turks*; the Grand Seignior came to see it when they came into the Harbour; they enter'd with a favourable Gale, the Flag and Ensigns flying, a Streamer at every Yard-Arm, all the Guns out and Sails full, and their waste Clothes spread; the Shores were full of People, and her Motion being retarded by the Current, gave them an Opportunity to take a full Prospect of her, the Decks being full of Men, the Ship curiously painted and richly gilded; which caused no small Admiration in all the *Turks*, who had never seen any thing comparable to her in all their Lives. As they passed by the Place where the Grand Seignior sat they fired sixty-one Guns. *Rycaut.*

There was then a remarkable Providence which punished a fraudulent Practice: A *Turk* having lent a good Sum of Money to a Christian to be paid on a certain Day, he came before the Time with another *Turk*, desiring it might be paid to that Person when it became due; the Christian did so, but he that received it denied the Receipt; it came to a Tryal before the Judge, when the *Turk* forswearing the Receipt, the Christian was obliged to pay it again, which he did, desiring God, by some publick Example, to shew who was in the Wrong;

Wrong; and the *Turk* going forth dropp'd down dead in the Street. God sometimes gives an Example to manifest a just Providence; but whereas many Criminals escape in this World, that is a Proof of a future Judgment.

There is a barbarous Custom, among other Barbarities, that the Grand Seignior cuts off his younger Brothers, lest they should make a Party and raise a Rebellion. *Achmet* the eighth Emperor oftentimes thought to put his Brother *Mustapha* to Death, and was strangely prevented; one Evening it was agreed that he should die the next Morning; but that Night he was so terrified with Apparitions and frightful Dreams concerning it, that he commanded his Brother should live. Another Time seeing him walking in the Garden, some Flatterers told him the Danger of suffering him to live; whereupon he took his Bow and Arrows, and aimed at his Brother to kill him; but at that Instant he felt such a Pain in his Arm and Shoulder that he was not able to shoot his Arrow; whereupon he said with a loud Voice, That *Mahomet* would have *Mustapha* to live. *Rycaut*.

This *Mustapha* came to the Throne, but was soon deposed, and succeeded by * *Osmond*. In * To this his Time, Anno 1618, there came News to Emperor Sir Thomas Roe was Ambassador from England, An. 1621. of a strange Apparition which was seen at *Medina*, *Mahomet's* burial Place; the People could read in *Arabian* Characters these Words in the Firmament, O why will ye believe

believe in Lyes? Between two and three in the Morning there was seen a Woman in white encircled with the Sun, having a Book in her Hand, and three Armies of *Turks, Persians* and *Arabians* facing her, which all fled at the opening of the Book; and presently all the Lamps about *Mahomet's Tomb* went out. One of their Priests said, *I fear our Religion will be proved corrupt, and our Prophet an Impostor*; whereupon the Company charged him with Blasphemy, and cruelly put him to Death. *Rycaut's Hist. Vol. II. p. 59.*

In the Year 1611, *Constantinople* and the Country thereabout was plagued with Clouds of *Grashoppers*; they shadow'd the very Sunbeams, and left not a green Herb nor Leaf in all the Country nor in the City; where they entered into the very Chambers annoying them exceedingly. This Judgment was attended with an extraordinary great Hail and abundance of Rain; the Pavements were torn up, the Stones carry'd together in heaps, and many Houses fell down. Perhaps these Creatures were *Locusts*, which they called *Grashoppers*; they had red Wings, and were said to be as big as *Dormice*; the *Dormouse* is a Field Mouse that sleeps all Winter. *Rycaut.*

Constantinople, Lat. 41, 4 M. the chief Seat of the *Turkish Empire*, at the Entrance of the *Euxine Sea*, a City of a delightful Situation, adorned with fine Buildings; but I find no natural Rarities. There was a remarkable Folly of the People which caused the Loss of this Place

Place to the Christians; there were many rich Merchants and other wealthy Citizens, who spared their Money in the Defence of it, and lost it in the Plunder: There is a remarkable narrow Sea, the Passage to the *Euxine*, and out-let to many great Rivers; it is called the *Propontis*, which is about twelve Miles long, the Mouth of it the *Bosphorus*, in this Place about a Mile over; it is a strong Current of deep Water which continually runs down. An Author saith, *By this Channel there is more Water discharged in a Year, than the Quantity of the whole Ocean.*

The *Caspian* Sea is as large as the *Euxine*, and has no visible out-let, tho' more Water runs into it. This indeed is a Wonder in Nature, which must find a Passage at least equal to the other, and that must be a subterraneous Channel, tho' it is not plainly discovered; some think it has a Way into the *Euxine* Sea, but it is more probably into the *Persian* Gulph. The Reason of this Opinion is, that there are many Trees growing upon the Banks on the South West Part of this Sea, and their Leaves are found in the *Persian* Gulph, whereabout no such Trees grow; there are two Whirlpools, which suck in the Water; so that here is a Bridge much larger than that of the *Anas* in Spain, viz. in length about 500 Miles, *Averil, Harris.*

Near the *Caspian* Sea to the North East is *Turchemen* in *Tartary*, Lat. 46, the original Country of the *Turks*, who first removed to

N

Turkestan

Turkestan or *Tocharestan*, towards the South East, North of the Empire of the *Mogul*, and South of *Samerchand*, Lat. 41, the Country of *Tamerlane*. The former Place was the Seat of *Torcis*, the Posterity of *Togarmach* the Son of *Gomer*, of whom the *Turks* descended. Some Hoords of them again removed and settled themselves in Part of *Armenia*, from them called *Turcomania*. *Atlas*.

Here is to be observed a most remarkable and just Providence, whereby the Christians of the East were punished, because they had neglected and abused their holy Religion; they were conquered by these Barbarians. The *Turks* were not heard of in *Europe* till the Year 1200; and the Foundation of their vast Empire was not laid till 1300, which was done by *Ottoman* the Head of the *Oguzian* Family; whence they were call'd *Ottomans*: They were not then *Mahometans*, but afterwards joyned with *Mahomet's* Followers 700 Years after his Time. This People God permitted to overthrow the Seven Churches of *Asia*, as it was foretold in the *Revelations*.

Smyrna. Near this Place there is a kind of Earth which boileth up out of the Ground, and is always gather'd before Sun-rise in such vast Quantities that many Camels are loaded daily with it to be carried to Soap-Houses, where being boiled together with Oil, it becomes an excellent sort of Soap. It was one of the Seven Churches, hath a pleasant Situation, at the Bottom of the Gulph of the *Archipelago*,

chipelago, and over-against the Island *Scio*. About half a League from the City are Salt-Pits, to which there is a pleasant Walk, Lat. 34, 45 Min.

About this Place is found the remarkable Creature the *Chamelion*, of which many Things related are fabulous, as that it lives upon Air; which has been believed, because commonly no Food has been found in them; but they live upon Flies, and have a Tongue fit for that End; it is as long as the Body, and has at the End of it a viscous Matter whereby it catcheth Flies and other small Insects, darting it out to a great Length with wonderful Celerity: They often change their Colour, sometimes three or four times in the Space of half an Hour, and to the same or near the Colour of any thing that is laid upon them; and they have a peculiar Faculty in their Eyes, by which they swiftly take their Prey; they can turn their Eyes two several Ways, and with the one look up and with the other down at the same time. Mr. *Le Brun* kept four of them six Months. *Harris*. Mr. *Boyle's Final Causes*.

There is a Fish called a *Pulp*, which floats upon the Surface of the Water like a slimy Scum, and when turned appears to be an Animal, with many long Legs like those of a Spider, and at each Leg a Bag full of Liquor like Water; it is of different Colours according to the Season and Nature of the Soil; it catches its Prey with its Legs, and frequently drowns Men who have the Misfortune to meet with it

The Wonders of Nature

as they wash in those Seas ; for it not only holds them fast with its long Legs, but by diffusing a venemous Liquor from its Bags, deprives them of Motion, and raises Inflammations in the Part it seizes. *Atlas.*

Lampsacus. Here was born *Priapus*, said to be the Son of *Bacchus* and *Venus* ; he was worshipped as a God and Keeper of their Gardens. They were a vicious People, and hated for their vicious worship. *Alexander* having resolved to destroy the Place, they sent the Philosopher *Anaximenes* as Ambassador to intreat him, because he esteemed learned Men. As he was coming near, *Alexander* swore he would deny whatsoever *Anaximenes* requested ; whereupon he petitioned him to destroy the City, by which Means it escaped at that Time ; it has often suffered by Wars ; and is now a small Town at the Mouth of the River *Granicus*.

Ephesus, another of the Seven Churches. Here are plenty of *Sturgeon*, of the Spawn whereof they make *Caveare* and *Botargo* ; and make a great Trade of it. In those Seas there is a strange Fish which appears above Water, somewhat like the Figure of a Man ; perhaps it is the *Mer-man* ; but the *Roman* Author calls it *Pistris*, and tells a strange Story of *Lucullus*. A Fortrefs there was besieged, which held out for the *Romans* ; *Lucullus* could not land his Men, because the Enemies Ships lay in the Way : He sends to them a Message, requiring them to hold out a while, and he would be with them presently ; he sets himself upon two
Bags

Bags fill'd with Wind, goes along by the Enemy in the Night, who took him for the *Pistris*; he gets into the Town, encourageth the People by his Presence, and raiseth the Siege. *Lucius Florus.*

Syria. About six Days Journey from *Aleppo* are the Ruins of the famous City *Palmyra* or *Tadmor*, where are Remains of *Porphyry* Pillars. About a League from this Place is a large Valley of Salt, most probably that mentioned 2 *Sam.* 8, 13. where King *David* smote the *Syrians*. Here the famous *Zenobia* was Queen, who was both learned and valiant; she subdued *Egypt* and other Countries, but was overcome by *Aurelius* and carried to *Rome Anno Dom.* 273. This Place is 135 Miles from *Damascus* to the N. E. about 150 Miles from the River *Euphrates*. *Damascus* has a pleasant Situation, Lat. 34.

Aleppo. Four Hours from this Place there is another Valley of Salt of three Hours extent. There is a dry Crust of Salt all over the Top of it, which sounds like frozen Snow. The good Salt is under the Surface, and is a kind of Rock. In the neighbouring Village *Gibul* vast heaps are laid up for Sale. The Valley is farmed of *G. Signior* at 200 Dollars *per Ann.* *Acre* formerly called *Ptolemais* was one of those Places, out of which *Israel* could not drive the *Canaanite*, because of their Infidelity. Here is the River *Belus*, famous for its Sand, an excellent material for Glass. It is said to

have ministred the first Occasion and Hint of that Invention. Lat. 38, 20.

Judea. This is the Scene of the greatest Wonders, and of the highest Importance. Here is Nature and Miracles joined together, to testify the Religion of the *Jews*, and after that the *Christian* Religion; which compleats the Work of Providence, to conduct future Generations to another Life. The whole Land was miraculously fruitful, which maintained double the Number of any other such Tract of Ground; but now is barren, in Comparison, because of the *Jews* Infidelity. *God turneth a fruitful Land into Barrenness for the Wickedness of them that dwell therein: And as it was threatned, when they had filled up the Measure of Iniquity, the Land hath spewed out her Inhabitants.* Lev. 18. 28.

This Land is all a Wonder in Nature, and Nature is assisted by Miracles, which change the Course of Nature and shew the Divine Power over it. The *Jews* were forbid to sow in every seventh Year, but sowed all the six Years between. Then the sixth Year, which naturally would produce the worst Crop, brought forth a double Crop; and the eighth Year, which followed the fallow, brought forth an ordinary Crop, to certify the *Jewish* Religion; and the ceasing of that Miracle certified the *Christian* Religion, with the ceasing of the *Jewish* Dispensation.

There

There is another Testimony in the same way; the Pool of *Bethesda* having lost its Virtue, which cured the Lame, Halt and Blind, after that an Angel had troubled the Water. It was void of Water when Mr. *Maundrel* saw it. It is nigh the Temple on one Side, and the other Side contiguous to *St. Stephen's-Gate*, being about forty Paces broad, 120 long, and eight deep. At the West-end there are the Remains of three old Arches, which seem to be part of the five Porches in which the Multitude of sick Persons sat to watch their Opportunity. This Miracle intimates to us that all ought to wait for the Divine Blessing, and to use the Means whatsoever God hath thought fit to offer us, especially for the Cure of our Souls. *Maundrel*. *Jerusalem* is 160 Miles S. W. from *Damascus*, which is fifteen Miles W. from *Palmyra*, which is about 200 Miles W. of *Babylon*.

There is the Lake *Asphaltites*, so called from ἀσφαλτῖς. *Bitumen*, otherwise called the *Dead-Sea*, because no Fish live in it; and no Bird can fly from one Side to the other but they will drop down by the Way, because of the sulphureous Vapours that continually ascend from it. This is partly from the natural Soil, joined with a miraculous Addition. It is not pernicious to a Man going into it, as Mr. *Maundrel* tried by swimming in it; but he says it bore up his Body with an uncommon Force. This Lake remains a Monument of God's Judgment, sent down upon a wicked
N 4 People;

People; and as a Warning to the World, because they had grossly transgressed the Law of Nature. *But when Men despise Christ's Miracles, it will be more tolerable for Sodom and Gomorrah, in the Day of Judgment, than for them.* Mat. 10. 15.

Mount Olivet. About three parts of the way to the Top is the Place where *Christ* uttered his Prophecy of the Destruction of *Jerusalem*; and a little on the right Hand is the Place where he dictated a second time his Prayer, to shew, by that Repetition, that He intended it for a set Form of Prayer. For it needed not to have been repeated if it was only designed for a summary Direction, as the Disciples at first thought it. Mount *Tabor* is about twelve Miles from the Sea of *Galilee*. This is believed to be the Place where our Lord was transfigured, and testified most plainly his Divine Nature, not publicly, but to three select Persons, Mat. 17. 2. Lat. 32. 40 m.

Jericho was formerly beautiful in her Palms and proud of her *Balsamum*, from which that precious Gum distill'd, which is now brought from *India*. There is a fine Vale about ten Miles over, in which now nothing grows but Spring-Grass. It is bounded with Mountains; among which is *Quarantania*, the highest, being in the Wilderness, where *Christ* was tempted, and from whence the Tempter shewed him all the Kingdoms of the Earth. It is now crown'd with a Chapel. There *Christ* set us an Example, and taught us to endure Temptations,

tations, that we may receive a Crown of Glory.

Thus God hath designed in all his Providences and Proceedings with Mankind, to instruct the World in proper Seasons, and to act in such a Manner as to preserve the Freedom of Man's Will, and to require a Will to serve him. He hath appointed Reason to govern and direct the Will; but he hath assisted both, as Occasion required by Man's Fall. All Nature is an Evidence for the God of Nature; and he hath assisted Nature by Miracles, to testify the Truth of Religion, yet in such a Measure as to lead and not to force the Inclination. *If ye be willing and obedient, ye shall eat the Good of the Land, Isa. 1. 19. If there be first a willing Mind, it is accepted according to that a Man hath, and not according to that a Man hath not. 2 Cor. 8. 12.*

Samaria, now called *Sebasta*. Here are some *Christians* who have a chief Priest. He told Mr. *Maundrel* what were those *Mandrakes* (*Dudaim*) which *Rachel* purchased of *Leah*. They were Plants of a large Leaf, bearing a sort of Fruit like an Apple, of an ill Savour and not wholesome to eat; but the Virtue of them was to help Conception, being laid under the Genial Bed. He saw several in the Way to *Jerusalem*, which might be a natural Means of Fruitfulness to the *Jews*; but perhaps they were scarce in *Mesopotamia*, where *Jacob's* Family then was.

Mount

Mount *Libanus*, Lat. 35. Between this and *Anti-Libanus* there is a Vale twenty-five Miles broad along the Coast, and the Length fifty, running up into the Country Eastward. The whole Compass of both Mountains about 700 Miles. Altho' this Mountain is so far South, yet it was covered with deep Snow in *May*, when Mr. *Maundrel* passed over it, and the frozen Snow bore their Horses. He viewed the Cedars, and measured one of the greatest, which was twelve Yards and six Inches about, and thirty-seven in the spread of its Boughs. About six Yards from the Ground it was divided into five Limbs, each of which was equal to a great Tree. *Maundrel*.

Tyre. There was first found the famous Purple Dye, taken from the *Ostrum*, the Liquor or Blood of the Shell-Fish *Murex*,—*Strato discumbitur Ostro*. It hath in its Jaws a white Vein which contains the precious Liquor. The Invention is ascribed to the *Tyrian Hercules*, who walking along the Shore with a Maid whom he loved, his Dog by chance seized on one of these Fish, cast up by the Sea, which dyed his Lips with the Tincture; which the Woman admiring, refused to be his until he brought her a Garment of that Colour; which he performed.

The Creature hath a Tongue about the Length of a Finger, so sharp and hard that he can open an Oyster with it; which was the Cause of his being taken. For the Fisher kept Oysters long out of the Water to make them gape,

gape, and baited with the Oyfters gaping; and the *Murex*, trusting in his Tongue, was catch'd by the sudden closing of the Oyfter. The Blood together with the opened Veins were drawn through a *Limbeck*. Now this Fish is not regarded upon this Account, there being since found a more ready Way to make as good a Purple-Dye.

The ancient River *Kishon* runs by the Side of Mount *Carmel*; not far from hence are *Tabor* and *Hermon*, where the Dew falls so much in the Night that the Tents which Travellers set up are as wet as if it had rained all Night. A little to the N. E. is the City *Shaphet*, thought to be the ancient *Bethulia*. It stands upon a high Mountain, and it may be supposed that *Christ* being in those Parts alluded to it, when he said *a City set on a Hill cannot be hid*. The Fowls (*Selave*,) wherewith the *Israelites* were fed, are of the same kind with our Quails. N^o c. 11. *Maundrel*.

Cesarea. *Herod I.* King of the *Jews*, Anno 16 before *Christ*, built a Mole in a circular Form with Stones brought afar off, fifty Foot long, eighteen broad and nine deep; some greater, some less; the Foundation was laid twenty Fathom deep into the Sea. *Prideaux*. This justifies Mr. *Maundrel's* Account, which some have called in Question, That at *Ealbeck*, the City of *Baal*, the ancient *Heliopolis*, there are such vast Stones in the Town-Wall. He measured three of them; one of which was twenty-one Yards long, the other two
twenty

twenty Yards each, all four Yards broad and as much deep. These Words signify the same, that is, *The City of the Sun*.

Arabia Deserta is a barren Country, excepting in the North part near *Euphrates*, there is some good Land, where was *Job's* Country. *Cellarius* places his Seat about sixty Miles S. E. from *Palmyra* or *Tadmor*. Among the Mountains of *Arabia* there are Trees which bear a sort of Wool like Cotton; but not so fine nor so white; and others that have Leaves and Flowers of a fine Scent, which the *Arabs* give to their Cattle. The chief Town in the North Part is *Anna* on the *Euphrates*; it extends about six Miles along the River. *Atlas*.

The Wilderness of *Sinai* is higher than the rest of the Country, and encompassed with Rocks and Hills ten or twelve Miles. The Road up to this Defart is cut out of the Rocks like Stairs. On the North-side are the Mountains of *Horeb* and *Sinai*. Near Mount *Sinai* there are great Flocks of large Ostriches, which tho' they cannot fly, yet run so fast fluttering with their Wings that a Horse cannot overtake them. They have Heads, Necks and Bunches on their Backs like Camels, from whence the *Turks* name them *Camel-Birds*. *Atlas*.

At the Foot of Mount *Horeb* there is a *Greek* Monastery called *St. Saviour*, it stands at the End of a large Plain, and is supposed to be the Place where *Moses* kept *Jethro's* Flock, and saw the *burning Bush*. There is a Church of fine Workmanship, and there is an Archbishop

bishop who has wonderful rich Vestments, which were presented by the Czar of *Muscovy*. *Thevenot* says there are fourteen thousand Steps from this Monastery to the Top of the Mountain. About a Quarter of a League Distance is the Place where (the *Greeks* say) the golden Calf was molten, and there is the Head of a Calf cut by them to the Life, as a Monument of it.

The *Arabs* are of the Race of *Ismael*, and his twelve Sons are the Patriarchs of the Tribes of the *Arabs*. They are called *Saracens*, which signifies *Plunderers*, and they glory in that Name ; and generally they live by Plunder at this Day, going in Companies to rob Travellers and Merchants. They followed *Mahomet*, and after his Death proceeded making many Conquests in *Asia* and *Africa*. They were met with by the *Turks*, and after several Battles the *Turks* embraced their Religion, and joined with them for a time. Afterwards the *Turks* drove them back to *Arabia*, to which they are now confined. The *Portuguese*, who traded with them in the *Red-Sea*, say that some of their Princes have fine Libraries with many *Latin* and *Greek* Authors compleat, of which we have only Fragments. *Atlas*.

Arabia. About *Zibit* in *Arabia-Felix* (which some think to be the ancient *Sabæa*) there is still the best *Frankincense* in the World, which grows here in great Abundance ; there is also Plenty of Balsam, Myrrh, Cassia, Manna and Coffee. Between this and *Arabia-Petræa*, there is

is a vast Tract of sandy Ground not inhabited; in passing it over Travellers make use of the Compass. Towards the Coast of the *Red-Sea* are those infamous Places *Mecca*, Lat. 22, 40, and *Medina*, 26, 50 m. the one for the Birth, the other for the Burial of the Impostor *Mahomet*. At *Mocha* the Fields are cover'd with Salt. Lat. 15.

Persia. *Teflis* Capital of *Georgia*, Lat. 43. Lon. 49, forty-seven Miles from *Erivan*, ninety Miles N. W. from *Derbent*. Five Leagues from *Erivan* begins the Mountain *Caucasus*, Part of which is Mount *Ararat*, famous for the Resting-place of *Noah's Ark*; of which we may observe that it has been question'd, How this Ark should contain all sorts of Creatures? The learned Dr. *Wilkins* has demonstrated that there was room enough and to spare; in which the Wisdom of God is eminent, which contrived and directed the Bigness of it; and it is very probable that this Experiment of the Ark taught the World the Arts both of Architecture and Navigation. *Georgia* is Part of the ancient *Colchis*. Near *Erzerom* Asparagus grows naturally along the Banks of *Euphrates*.

Tauris, Lat. 33. Many good Geographers are of Opinion that this is the famous *Ecbatana*; but there are no Remains of *Daniel's Palace*. In and about this Place there are said to grow no less than sixty sorts of Grapes. On the North-side is the River *Agi* or the *Salt-River*, whose Water is made salt by the little Rivulets which pass through salt Marshes; and for

for that Reason it hath no Fish. In travelling over the Mountains towards this Place, upon the Tops of some of them there are several Sorts of Shells, as if it had been on the Sea-shore. *Tavernier.*

Ispahan, Lat. 32. 26 m, now the chief City of *Persia*, about eight Leagues in Circumference. There is a kind of Grapes as big as a Man's Thumb, without any Stone, the Meat firm and of a most delicious Taste. Twelve Leagues Eastward is *Casbin*, a large old Town; here the *Holstein* Ambassadors were shewed a tame Elephant of the Height of two Men, which was guided by a little Boy, who made him do many Tricks, and to fall down and rise as he thought fit. Some Geographers affirm it to have been the City which the *Greeks* called *Ragea* or *Rages*, where *Tobit* lived. The Air is very hot in Summer; but the Nights are so cold that if a Man exposes him never so little to the Air after he is undress'd, he is sure to fall sick.

The Mountain *Taurus* joins with *Caucasus* and makes a continued Ridge through *Persia* to *China*. The Wild-Geese leave the South because of the Heat, and fly to the North; and when they come to Mount *Taurus*, which abounds with Eagles, being in fear of them they stop their Beaks with Stones, on purpose that the greatest Necessity may not draw from them any Noise; but being past the Mountain let them fall again. Not only Men, but other Animals, tho' they want Reason, are taught
by

by Nature to keep Silence for their Preservation.

Between *Casbin* and *Com* there is the Mountain *Coub Telism*, which hath this peculiar that, as you approach nearer to it, it shews a different Form, and varies both in its Bigness and Figure. The Point or Top of it is always in Sight, and you would think that it turned to that Side, which way soever you stood to look upon it; which ariseth from the Variety of the Optick *Medium* through which it is beheld. At *Com*, a large City, their Earthen-ware hath a peculiar property, that it cools the Water in Summer both wonderfully and suddenly, by reason of its continual Transpiration. *Tavernier*.

The Mountain *Taurus* bounds the Kingdom of *Hyrkania*; it is reputed the highest in the World, it reaches a good way above the middle Region, leaving the Clouds a great way below. The highest Part is the Peak of *Damoon*, from whence the *Caspian-Sea* is seen, tho' one hundred and eighty Miles distant. It is cover'd all over with Sulphur, which sparkles in the Night like Fire. The *Jews* inhabit about this Mountain in great Multitudes, who assert that they were settled here by *Salmanesser*, *An. Mun.* 3220. c. 2. *Kings*; and that *Noah's Ark* rested upon this Pike, and not upon that called *Ararat* or *Baris*; but this seems to take its Name from that Accident, these Words signifying a *Ship*.

Erivan,

Erivan, the Capital of *Persian Armenia*, Lat. 41. The Inhabitants say that this is the oldest Town in the World; that it was built by *Noah* and his Sons when they came down from Mount *Ararat*. From hence three Leagues West is the Monastery of *three Churches*, one of which is the *Patriarchal-Church*, where they say *Noah* built the Ark. The Snow lies eight Months on the Mountains *Ararat* and *Caucasus*, and breeds white Worms as big as one's little Finger, which being crush'd, there issues out a Moisture colder than Snow itself.

Tournfort.

Mr. *Tournfort* lay a Night upon this Mountain, and says it is the most disagreeable Place upon the Earth. There is a terrible Abyss, into which Pieces of Rock continually fall with a terrible Noise. Towards the Middle there are Tigers; and the Natives catch the young ones with Nets. The Monks say that the Ark is still upon the Top of *Ararat*; he supposes, to induce strangers to come hither and give them Money; for they say at the same time it is exceeding dangerous to go to the Place, and some have suffer'd by the Attempt. *Atlas.*

From *Erivan* to the River *Aras*, the Fields are cover'd with Salt after Showers of Rain; and in the Road from hence to *Teffis* there are Pits of Fossile Salt, enough to supply all *Persia*. In the Places about the *Caspian Sea* they have great Earthquakes, and in Summer Nights fiery Meteors, which resemble sometimes Rock-

ets, attended with Smoak and black Vapours; and the Stars give so much Light that Men travel and know one another with great Ease; which must proceed from an extraordinary Purenese of the Air. Lat. 37.

The *Caspian* Sea is about five hundred Miles in length, and four hundred and eighty in breadth; Sailors say it is unfathomable in the Middle, and thirty or forty Fathom not far from the Shore in some Places; yet about the Mouth of the *Volga* there are Shallows; which River, with a hundred more, run into it, and have no visible Way out, nor hath it any Tide. It abounds with *Porpoises* and other Sea Fish; and there is a very deformed sort called *Glutton*, whose Head seems to be within its Belly; it has a round Tail seven or eight Feet broad, and as many long, by which it can overturn a Boat. At *Chocoporo* there is a River going into the *Caspian* Sea, which is salt one Month in the Year; but the Reason is not known. *Herbert*.

Baku is on the Banks of the *Caspian* Sea; within two or three Leagues of this Place the Soil is full of *Salt-Petre*; so that the Country burns continually in some Places. At *Lar*, Lat. 28. there are Springs of Oil, excellent against Poison; they flow only in *June*, and in small Quantities, which are kept for the King's Use. The King has 3000 Pidgeon-houses at *Ispahan*, and has more Profit from the Dung than from the Birds. Here the *Poppies* yield more Juice than those of other Countries, and the People that gather them look like dead Corpses,

Corpse, and always lean, and tremble much. There is a Lake upon the Top of a high Mountain. *Tavernier.*

Bassora, Lat. 31, near the West End of the *Persian Gulph*. *Thevenot* says, here the Needle declines from North to West about $31\frac{1}{2}$ Deg. It is a Place of good Trade, by which the Caravans pass to *Aleppo*. It is 195 Miles S. E. of *Bagdat*, below the Conflux of *Tigris* and *Euphrates*. Prodigious Numbers of *Locusts* fly by this Place four times a Year, and are carry'd by the Winds to the Deserts, where they die, otherwise *Chaldea* wou'd be laid waste. *Bagdat* was built out of the Ruins of *Old Babylon*, not in the same Place, but about ten Miles distant from it, seated on the River *Tigris*.

Babylon, N. Lat. 34. is upon the River *Euphrates*, takes its Name from *Babel*, and that is derived from Confusion; because God confounded the Language of those presumptuous Builders under *Nimrod*, who would pretend to secure themselves against the Divine Power, by building an high Tower, which God permitted them to carry on for thirty Years to the Heighth of 5000 Paces, as some say; yet by that Providence was left unfinished. That Country was afterwards called *Chaldæa*, and last of all *Babylonia*, West from *Susearia*, so named from *Susban* the Palace.

Susban was one of the famous Palaces of the Kings of *Media*, and was like a great City; there they spent three Months of the Spring, as they did the two Summer Months at *Ecba-*

tan, and the seven Winter Months at *Babylon*. Near this Place was Paradise; for tho' there are many wild Conceits about it, yet the Rivers by which it was bounded, determine it to have been in *Mesopotamia*, in the Place still called *Eden*; for it was watered with *Tigris* and *Euphrates*, which, in their several Courses, the one from *Periardo* in *Armenia*, the other from Mount *Libanus*, divide themselves into four Branches, two of which are *Pison* and *Gihon*; and tho' *Pison* is said to compass *Havilah*, it is not that in *India* but in *Susiana*; so that all things concur to fix it in this Place. *Tavernier*.

Gomron, Lat. 27, on the other side of the *Persian* Gulph. There is the fiery Wind call'd *Samiel*, which blows in *April*, and burns some times like Lightning. *Tavernier* says, himself and his Company had like to have been kill'd by it, if some *Arabians* perceiving it coming had not persuaded them to dismount, and lie flat on their Bellies for half an Hour; but their Horses were put into such a Sweat, that they were hardly able to carry them. This Wind issues out of the Clefts and Caves of Mountains, and is pernicious in *Persia*. In the Year 1665, that Wind killed 4000 Persons at *Basfora*. *Thevenot*.

At *Gomron* they have no good Water, but what they fetch from a Mountain four Leagues distant on Camels; the ordinary Water breeds Worms in the Feet and Legs, which are very dangerous, if not pulled out whole; therefore
when

when a Worm begins to appear out of the Flesh, they tie the End of it upon a Roller, and wrap it round gently by Degrees; if it break, the remaining Part in the Flesh often proves fatal; the whole would be a Yard or more in length. The Way to prevent this bad Effect of the Water is to quench a red hot Iron in it, and then to strain it through Linnen.

In this Country there is Plenty of Dates, and the Trees are said to be Male and Female; the latter will bear no Fruit, except the Male be planted near them; and except they take a Flower in blossom from the Male and put it into the Heart of the Female, a little above the Stem, the Fruit will fall off before it be ripe. This is contradicted in *Italy* by an Observation of a Date Tree which bore Fruit standing alone; but perhaps a different Country may have different Effects; they make a sort of Wine of them, or, if they be dried, they eat as if they were candied; and so they are a good sort of Bread.

Ormus, an Island at the Mouth of the *Persian* Gulph; it is all cover'd with Salt: There is the *Baniam* Tree, whose Branches spread so far as to make a Shade, under which some hundreds of Men may sit without crowding; and by their Weight they fall to the Ground, take Root and rise again, and form distinct Apartments. The * *Banians* are Brokers or Bankers, who so neatly trim and support those Trees that there is room for a Man to toss a Pike

* The *Banians*, or some of them serve as Priests in the *Indies*.

Pike under them. *Tavernier* says, he saw one of them, which was 200 Paces round; and from them it is so called. *Atlas*.

Here the *English* were to have half the Customs, but are defrauded of a great Part; and they are allowed to export twelve Horses without Custom, because they assisted the *Persians* in taking *Ormus* from the *Portuguese*. One of their ordinary Horses is sold in the *Indies* for 400 Crowns: What Horses more either *English* or *Dutch* export, they pay for them 50 Crowns Duty. *Kherman*, North of the Gulph; here the Sheep bear the finest Wool in *Persia*, and much finer than any in *Europe*: It is naturally of a clear brown, and makes *Serges* of as good a Lustre as Silk: They cast their Fleeces naturally in *May*, when their Skins are as smooth as those of a scalded Pig. *Atlas*.

Gombroon, in the *Persian* Gulph, a City of great Trade, in Raw Silk, Carpets, Cotton, &c. It is much infested with *Jackals*, which invade the Town by Night in Troops, and tear the Dead out of their Graves, howling in a dreadful manner. The Inhabitants hunt them with Dogs, Swords and Lances, but they are too many and daring to be conquered. *Schiras*, Lat. 29. Here it is said * Magick was invented, and that from hence the *Magi* set forth to worship our Saviour at his Birth; and that here was born the first *Sibil*, that prophesied of our Saviour's Incarnation. This is the Capital of the Province of *Fars*, which Province reaches to the Walls of *Gombroon*. *Herbert*.

Tartary.

* In the early times Magick was only the Study of Natural Philosophy.

Tartary. *Dauria*, a Province of *Muscovite Tartary*. The People here delight in long Hair, and are very careful to preserve it. A Prince of the Country came to wait upon Ambassador *Ides*, who had prodigious long Hair bound up in a Leather Band, and wound three times about his Shoulders, which was untied at his Request; it was four *Dutch* Ells long; and he had a Son of six Years old, whose Hair was an Ell long. The River *Jaick* abounds with *Sturgeon*, insomuch that the Inhabitants easily take them with a Hook fastened to the End of a Pole. *Atlas.*

Siberia. There are black Foxes which are no where to be found but in this Province and North *Tartary*; they are valued at so high a Rate as to fill the Skin with Crown Pieces; there are also *Sables* and *Martins*, whose Skin is a highly valuable Fur; they are hunted with Dogs, or taken with Traps. The latest Historians and Travellers say, that *Tenduc*, North of the *Mogul*, was the Seat of *Prester John*; and that there is such a Prince still in being, tho' now more obscure and less regarded; and they give the Reason of the Mistake, that the *Abissine* King was *Prester John*, contracted from *Presbyter*. *Atlas.*

There is the Creature, by some accounted the *Behemoth*, found most commonly in the River *Leke*, or near the Shore of the *Tartarian* Sea: It is an amphibious Animal, as large and no less dangerous than a *Crocodile*, and something like it; but this has two Tusks about ten

Inches long, and two in Diameter at the Bottom; which are finer Ivory than the Elephants, and have a peculiar Quality to stanch Blood, being carried about a Person subject to bleeding; which is the Reason that the *Persians* and *Turks* prefer it before Gold. *Tongusia*, in the middle of *Tartary*, is the most inland Country in the World, being 2400 Miles from the Ocean.

China. The famous Wall divides *Tartary* from *China*, and was built to stop the Incursions of the *Tartars*; a prodigious Work. It is reckoned 1600 Miles in length, fifteen Yards high in most Places, and six in breadth. It is built over Vales and Mountains. *Le Compte* measured the height of it in one Place, where it was 1730 Foot high, viz. between Mountains; and in good Repair as if it had not been built above thirty Years. It is strengthened with Towers, two Bow-shots from one another. It was built by the Emperor *Cbins*, two hundred Years before *Christ*.

There is a Bridge called *Saffrany*, which reaches from one Mountain to another, being 200 Yards long and 250 high, and all but one Arch; whence it is called by Travellers *Pons volans*. There is a large Mountain full of terrible Caverns, in one of which is a Lake, into which if a Stone be cast there follows a hideous Noise like a Clap of Thunder. There are several *Vulcano's*, one of which called *Linesung*, vomits out Fire and Ashes so furiously as to raise a Tempest in the Air. There are Foun-
tains

tains which send forth so hot a Steam that the People usually boil Meat over them. *Atlas.*

The *Chinese* were formerly called *Seres*, from whence the *Latin* Word *Serica* is derived. They first made Silk from the Silk-Worm, long before *Augustus Cæsar*. To him the *Seres* sent Ambassadors to desire his Friendship; in which Journey they were four Years-coming and going. At that time and long after Silk was sold for its Weight in Gold. *Justinian*, Emperor, *An.* 565, sent two Monks to *China*, who brought a great Number of the Eggs of Silk-Worms to *Constantinople*, from whence they were propagated in *Greece* and *Italy*. *Atlas.*

Hangcheu, on the 18th Day of every Month the River flows higher than at other times; and on the 18th Day of the eighth Month the Tide rises so high before the City that the People repair in Multitudes to see this strange *Phænomenon*; and their Philosophers can give no Account of the Cause of it. There is the *Tallow-tree*, whose Fruit contains divers Kernels of the Size of a Nut; which being mixed with a little Oil makes very good Candles, and smells as Tallow. There are several Lakes which change Copper into Iron, or make it of the like Resemblance; and cause Storms when any thing is cast into them.

Chusan. There grows the *Thee* or *Tea*. Mr. *Cunningham*, Physician to the *English* at this Place, and one of the *Royal Society*, has transmitted to that honourable and learned Society an Account of Tea, viz. That the several sorts
proceed

proceed from one and the same Plant, and only differ in Soil and Season of gathering. The *Bohea* is the first Bud, and is so called from the Mountains in *Fokien*, where it chiefly grows; it is gathered in the beginning of *March*. The *Bing* or *Imperial* is the second Growth, in *April*. The *Singloe* or *Green Tea* the last Growth, in *May* and *June*. The first is dried in the Shade, the other two over the Fire in Pans. *Atlas*.

The best Tea smells and tastes well, looks all of a Colour, is very crisp, and opens soonest when infused. Small black Leaves and Dirt amongst it is a sign of the worst Sort. The best Sort of *Green* has a fresh and strong Flavour, and the greener the better. The Author advises the Buyer to chew it, or to put the like Quantity into several Pots of Water; and that which holds longest of a pale amber Colour is better than that which turns brownish. It is not an Herb, but the Leaf of a Shrub or small Tree. But there is some other Sorts perhaps more lately discovered, because some Leaves are plain like small Sorrel, others are indented. *Atlas*.

Pequin or *Pekin*, the Capital City of *China*, Lat. 40. Lon. 116. It is six large Leagues in Compass. In the middle of it is the chief Idol Temple, which hath the largest Bell in the World, 120000 lb. Weight. The City is not so populous as reported, or as it seems to be, because the Streets are always crowded with People from the Country, and the numerous Attendance of the Great Men. South-West of
Pekin

Pekin is the Province of *Chamsi*, which abounds with Fire-Wells. They close up their Mouths to the Bigness of a Pot, and boil their Meat on them. The Flame is thick, carried about in Stoves, and does not consume Wood. *Kircher*.

Canton, S. E. from *Pekin*. There is a Spring near the City *Ninyang*, which, they say, prolongs Life. Some Cows have a Stone in their Paunch as large as a Goose Egg, which is preferred to *Bezoar* for Virtue. *Nieuboff* observes many strange things of the River *Licom* here; among others, that he cast nine Sticks into it, of which six drove South and three North. There is the *Royal Canal*, being without Sluices able to carry small Vessels, and serves to a considerable Trade. In the Neighbourhood there is a Lake, with a huge Stone in the middle of it, like a Dragon with a Man's Head; which they call the *Spirit of Thunder*, because being struck on the Belly it makes a Noise like Thunder. *Atlas*.

On the Canal aforesaid is *Tuncham*, Lat. 37. where is the greatest Trade in Silk. On the Top of a neighbouring Hill there is a Column an hundred Rods high, which being touched with a Finger sounds like a Drum. On the same Canal at *Linstin* there is a Tower of wonderful Architecture, consisting of nine Stories $13\frac{1}{2}$ Feet each. There are Copper Bells in Galleries, which chime pleasantly when moved by the Wind. Round the Tower there are many Images of all Sizes, reckoned the greatest
Curi-

Curiosities in *China*; and on the Top there is a She-Idol thirty Feet high.

In *Fokien* there is a River whose Water is green, and turns Iron into Copper. There are several Fountains which ebb and flow regularly. There are two near the City of *Junchan* which proceed from a Stone resembling a Man's Nose, out of whose Nostrils issues the one cold, the other hot Water. There are several Springs hot and cold at a very small Distance. In *Xangtung* there is a Spring which sends out hot and cold Water at the same time, which separate from one another; and therefore is reckoned a Miracle in Nature.

There is a most beautiful kind of Fish, which great Men keep in their Ponds for Ornament. The Male is of a delicate red Colour from the Head to the middle, and from thence to the end of the Tail of a Gold Colour; which exceeds the finest Gilding. They are about the length of ones Finger, and thick in Proportion. Their Eggs swim on the Water, and are preserved by the Inhabitants in small Vessels till hatched by the Heat of the Sun. They are reckoned a Wonder in Nature. *Atlas.*

Their chief Festival is on the 15th Day of the first Moon of their Year; when they kindle so many Bonfires, set up so many Lant-horns, and play such Multitudes of Fire-works that the whole Country seems to be on a Flame. Their Fire-works are very ingenious, representing Towers, Boats, Fish, Dragons, Tigers,

gers, Elephants, &c. They are very dextrous in placing their Lanthorns and Figures within them, so as to represent Horses running, Vessels sailing, Armies marching, Princes with large Trains. *Le Compte* says the Number of Lanthorns on this Occasion is at least two hundred Millions.

The Quality wear long Nails to distinguish them from the Vulgar, who must cut them or else they cannot work. Their Nails are commonly an Inch longer than their Fingers, clear as Horn, and round like a Scoop; and so valuable that they put hollow Canes on them at Night lest they should spoil them by scratching. Many Grandees ruin themselves by studying Alchymy, and seeking after Drugs to make them immortal; and they have printed several Books upon both Subjects. They feast six Months in Honour of the Dead; the Priests sing and pray at the Tombs, for which they are well paid. *Le Compte*.

Chenfi West from *Chamsi*. Here is a Beast called *Xee*, of the Size of a young Hind, that has Musk in his Navel, and cannot live in any other Province. Here are Cocks and Hens with Wool instead of Feathers. Here is a Mountain shaped like a Cock which makes a great Noise before a Tempest; another which, if a Drum is beat upon it, sends forth Thunder and Lightening. Here is an Herb called *Quei*, which being eat causes Laughter. Here are Bats as big as Geese. Here is a Stone of inestimable Value, which increaseth and decreaseth

creaseth with the Moon; and an Herb called the *Golden Thread of Silk-Worms*, which cures many Diseases.

Honan Province lies South from *Xanfi*. Here is a Mountain where the Natives fancy the *Phoenix* died, and is lamented by all Birds once a Year; when the People go with Lights in their Hands by Night and catch Multitudes. *Nankin* Province is East from *Honan* as far as the Sea; the Capital hath the same Name, which they say far exceeds all in the World both for Bulk and Ornament, seventeen *French* Leagues in Compass. Here is a beautiful Tower of *Porcellane* built as that before mentioned, Lat. 37. Lon. 117. *Honquan* is South from *Honan*. In the River *Siang* there is a Creature like a Horse, with Tigers Claws and Scales instead of Hair. *Harris*.

Kianfi East from *Honquan*. In this Province there is a Mountain with two Tops, resembling a Dragon looking fiercely at a rampant Tiger. *Kircher* says there is a Mountain from whence issue continual Blasts in Summer, but none in the Spring or Winter. *Chekian* lies East from *Chianfi*, where are Trees so large, it is said, eight Men cannot fathom them. Here is a Mountain whose Soil is of that Quality that it tames Tigers and Snakes. *Hantchan* is the Capital, Lat. 31. East from hence is *Nimpo*, where it is but two Days Passage to *Japan*.

In the South Provinces there is a Canal 245 Leagues long, that has 72 Sluices, by which Goods

Goods are brought up to *Pekin*; and above one thousand Barks from eighty to one hundred Tun make a Voyage once a Year on the King's Account. Near *Toming* there is a River, whose Water turns blue in Harvest; and the Inhabitants use it to die that Colour. There is a River which will bear no Timber, and another whose Water is sweet-scented. They catch Fish by the Help of Cormorants; they tie a String round their Necks above their Stomachs, and when they have filled the Bag which hangs under their Throat, they are forced to disgorge the Fish. *Atlas.*

When their great Men are a dying, armed Men strike the Air with Swords near their Mouths, and fire Muskets, to hinder the Devils from hurting the departing Soul. *Barri* the *Jesuit* saw this done; and tells very odd Stories of their Sorcerers and Priests, and of their *Incubi* and *Succubi*, and the Devils walking about in human Shape; and that the rich People are glad that their Wives have such Familiars. He and his Brethren made the greatest Harvest of Profelytes, and confounded their Astrologers by foretelling an Eclipse; which they could not do.

Tonquin Kingdom joins upon *China*, S. E. The Capital is *Kecho*, Lat. 22. Here several Lords and Ladies of the Court are buried alive with the King, to serve in the other World. *Cochin-China* is further South. Here are great Quantities of eatable Birds-Nests, which taste like a Mixture of many Spices, and make a
most

most delicious Sauce. Here are many Elephants, and much bigger than those of *India*. The Feet of the Males are half a Yard Diameter, and their Teeth four Yards long. Here is such Plenty of Silk that every Body wears it about their ordinary Labour. *Borri, Atlas.*

Siam, Lat. 14, Lon. 100, is on both Sides of the River *Menan*. This River, like others, overflows at a certain Time. Nothing can be more magnificent than the King's publick Appearance, which is generally in *November*, when the Inundation begins to decrease; which is ascribed to his Influence. He goes in a Galley, which shines with Gold and precious Stones, strikes the River three times with a golden Scimiter, and commands the River to retire to the Sea. The Priests make the People believe that the Inundation stops by the King's Power; and they lie prostrate on the Banks during the Ceremony.

Bengal, a Province of *Indostan* or *Mogul's* Empire, is on both Sides of the Tropick of *Cancer*, and on both Sides of the River *Ganges*. Here the *Pagans* used to burn the Widows; but in some different Manner from others. The Widow is washed with the Corps of her Husband in the River *Ganges*, and then is burned with it laid a-cross on her Knees; she rejoices at the Execution, dances up to the Funeral-pile, and receives Letters and Tokens for Friends in the other World. But since the *Mahometans* became Masters of the Country,

Country, they have put a Stop to this Practice.

Atlas.

Piple, a Port-Town at the Mouth of the West-Branch of *Ganges*; and near to it is *Patna*, where the *English* and *Dutch* have Factories. Lat. 26. *Halabas*, at the Conflux of the *Ganges* and *Gemima*, hath a famous Citadel: and there is an ancient Obelisk of hard red Stone, supposed to have been erected by *Alexander the Great* or *Bacchus*. The Town is four Leagues round. In some Part of *Malacca* there is a People that, like Owls, cannot see in the Day-time, and therefore sleep most of it, and do all their Business in the Night.

Atlas.

The great *Peninsula*, between the Rivers *Ganges* and *Indus*, is a great Part of the *Mogul's* Empire. At the Head of it on the West-side is *Surat*, Lat. 21, 20. Lon. 70. Two Degrees below is *Bombay*, and the chief Town of the *Portuguese*, *Goa*, Lat. 16. There is the Coast of *Malabar* from the thirteenth Degree to the Cape *Comorin* $7\frac{1}{2}$ Deg. which is the Point of the *Peninsula*. To the East on the other Side is *Fort St. George*, viz. in Lat. 13. The Governor lives in great Power and State, has a Guard of three or four hundred *Blacks*, and two Union Flags carried before him.

Atlas.

Golconda is a Kingdom dependent upon the *Great Mogul*: Along the Coast North of *Fort St. George* is the Town *Golconda*, Lat. 16. Here they cut *Sapphires* with a Bow of Wire and

a Solution of the Powder of white Emeralds found in the Country. There is Plenty of Cocoa-Nuts, of whose Kernel they make Arrack. *Colour* 30 Leagues N. E. from *Golconda*: Near this Place is a Diamond Mine. It is in a Mountain, from the Top whereof the Workmen descend into a large Vale, where they search in rocky Ground, and work naked lest they should steal any Diamonds; but they will swallow small ones. *Masulipatan* is twenty-four Leagues North-East from *Colour*. Here they stain *Callicoes* the best of any in the *Indies*, and the Children do it nicely with Pencils.

At *Surat* the *English* and *Dutch* have great Factories. A Castle defends the Entrance, which was built by *Tamerlane*. In their Gardens they have Silk Cotton-trees, and one named *Culga* is as red as Scarlet in the Morning, pale at Noon and Milk-white at Night. They have another called *Alluk*, whose Bark is a present Remedy against all Fluxes. Here are many Hermaphrodites, who are obliged to wear a Man's Turbant and Womens Apparel. There is a vast large Cistern that supplies all the City with Water. It is eight-square, having at each Corner a Pair of Stairs, and in the Middle a most sumptuous Sepulchre of the Founder. *Atlas*.

Pegu, a mighty Kingdom, borders upon *Bengala* to the East; the City Lat. 18. The King's Palace is as big as a great City, and there is a very large Castle, wherein he keeps eight hundred Elephants. They take the wild
Elephants

Elephants by sending tame Females into the Forests, which decoy them into Stables, where they are tamed by tying their Legs to three or four tame Elephants. A white Elephant is very rare, and therefore highly esteemed. The King of *Pegu* having heard that the King of *Siam* had two white Elephants, sent to request one of them, which he refusing to sell at any Price, the other invaded him with a vast Army, conquered and made him his Tributary; tho', says the Historian, with the Loss of five hundred thousand Men.

Amadabat, Lat. 25. Lon. 72. in the *Mogul's* Empire. The *English* have a Fair-Lodge here, with Courts and Apartments for their Goods. There are here Hospitals for lame and wounded Beasts or Birds, that are carefully fed by the Pagans. They likewise feed a Multitude of Apes that have got a haunt of coming to the Town on purpose, and retire very orderly to the neighbouring Woods. They kill no harmless Creatures, because they believe the Transmigration of Souls, and suppose the Souls of Men are lodg'd in them, and therefore they also shew Kindness to them.

They are even favourable to Crocodiles; the *Benjans* believe that such as are destroyed by them go straitways to *Paradise*, and therefore will not destroy them. The King order'd one to be killed which had done much Mischief, and they found a Woman with all her Clothes in his Belly; he was about thirty Foot long. Here are Bats as big as our Crows, some

as big as Hens, which are very troublesome; which obligeth the Country People to keep a constant Watch in their Gardens. There is the *Fire-fly*, an admirable Creature, which hath four Wings like Locusts: Multitudes sit upon Trees in the Night, and make a pleasant Show upon the Rivers.

The Kingdom of *Decan*. The chief City is *Visiapour*, Lat. 17. in the Neighbourhood of *Goa*. It is govern'd by a King who is Tributary to the *Great Mogul*. The *English* have a Trade here, and employ the *Benians* or *Banians*, that are Brokers or Bankers. There is the *Nure-tree*, which every Morning is full of stringy red Flowers, which in the Heat of the Day fall down in Showers to the Ground. The Tree blossoms again in the Night, and daily appears in a new Livery. The King has large Artillery, one of them a Brass Cannon, the Ball whereof weighs eight hundred Weight. *Atlas*.

Cambaya, fifty-eight Miles South-West from *Amadabad*. The Inhabitants are Idolaters, mostly *Banians* and *Raspouts*, which last are Men of War, who think it unlawful to kill any brute Creature, especially Monkeys and Apes, because they most resemble Mankind and are most likely to have Mens Souls by a Transmigration. These Creatures therefore are so encouraged that the City is pestered with them. The Monkeys swarm upon the Tops of Houses, and throw things at Peoples Heads. The Tide is so swift on the North of the Gulph,

Gulph, that a Man on Horseback cannot keep Pace with the first Waves. The neighbouring Woods abound with Peacocks. Mr. *Finch, Harris.*

Some People of the East are not so civil in some Respects to the Monkeys. There is a great Wood plentifully stock'd with them, a High-way runs through the Middle, and the Monkeys on one-Side are declared Enemies to those on the other. When the People have a mind to give themselves a Diversion, they set the poor Animals together by the Ears, which they do after this Manner: They place several Pots of Rice in the Middle of the Road, with Heaps of Cudgels near the Pots. The Monkeys, on the Discovery of the Provisions, descend from the Trees in great Numbers, take up the Arms which their good Friends have furnished them with, and belabour one another with a Storm of Thwacks, to the Mirth and Entertainment of the Beholders. *Tavernier.*

Banda hath its Capital of the same Name, Lat. 26. This Country is much infested with Scorpions, whose Venom they draw out by holding a live Coal to the Wound. In some Parts the Females marry at eight or nine Years of Age, and have Children at ten. *Agra* lies East from *Banda* and North 27 Lat. There is a *Mausoleum* built by the Emperor *Jehan-Guir* for his Father and his beloved Queen. The Dome is supported by four great Arches, embellished with Jasper and precious Stones. *Bernier* thinks it deserves better to be reckon-

ed among the Wonders of the World than the Pyramids of *Egypt*, or any thing else of Man's Art.

Bombay, an Island near to *Surat*, Lat. 18. It belongs to the *English*, given by the Crown of *Portugal* to K. *Charles II.* upon his Marriage with the *Infanta*, and sold to the *East India* Company. Near it is the *Isle of Elephants*, most remarkable for the *Toddy Tree*, which hath a plentiful Sap that is used for Drink; and there are the *Toddy Birds*, so named from those Trees, wherein they build their Nests of wonderful Curiosity, and hang them by tender Twigs to small Branches; so as the *Squirrels*, which are their mortal Enemies, cannot come at them; and some hundreds of these Nests hang together. *Harris.*

Phillippin Islands. In the Sea surrounding these Islands there is frequently seen a Sea-Monster about the Bigness of a Calf, which resembles the ancient *Syrens*; the *English* term it the *Woman Fish*, because its Head, Face, Neck and Breast are like those of a Woman: There is the *Cocoa Nut*, of a kind above ordinary, of whose Kernel they make Wine, which being long kept, becomes as strong as *Spanish* Wine. There are *Bats* generally as large as *Kites*; and some so large that their Wings spread seven or eight Feet: These Islands abound in *Civet Cats* and in *Algalia's*, which are the Creatures from whence they get the *Musk*. They are 270 Leagues to the South from *Japan*.

Here

Here are very large *Monkeys* and *Baboons*; some of them go upon two Feet, and will defend themselves against Men that attack them. When they can find no Fruit in the Mountains they go down to the Sea to catch Crabs, Oysters, &c. and that the Oyster may not close and catch their Paws, they first put in a Stone to prevent it shutting close, the Oysters being very large: They also take Crabs (like the *Raccoons* in *America*) by putting their Tails in the Holes where they lie, which the Crab taking hold of for a Bait, the Monkey jerks him out. *Atlas.*

Japan, *Firando* the chief City, Lat. 34. 30 M. *Meaco* 36. There is a Fountain whose Water is almost equally hot with burning Oil; it breaks out only twice a Day for the Space of one Hour, and the Eruption is so violent, that nothing can withstand it; it will raise up and throw away the greatest Stone that can be laid over its Mouth, and that with such a Noise that it frequently resembles the Report of a Great Gun. There is a prodigious high Mountain equal to the famous Pike of *Teneriff*, and thought by some to surpass it, visible almost 40 Leagues at Sea, tho' 18 distant from the Shore. *Saris, Atlas.*

Here is a monstrous Image of Copper, 70 Feet high, 80 broad, his Head big enough to hold 15 Men, his Thumb 40 Inches in compass, and all other Parts proportionable. Among other Sacrifices a Maid is brought to him every new Moon; at her Entrance there are many

Lights, but soon after extinguished as it were miraculously; and the Deity is said to company with her in the Dark. At her Return she is entertain'd with Musick, and resolves many Questions. Here is both a Trick of the Priest, and a Delusion of the Devil, whom God permits to gain a Power over ignorant People, who will not seek after Knowledge.

Changte in China. There is a sort of Fish that cries like a Child when taken, and resembles a small *Crocodile*; its Fat is of that Nature that, when it once burns, neither Water nor any thing else can quench it. *Chaoking*: There is a Fish called the *Swimming Cow*, which comes sometimes on Land and fights with other Cows; but when it stays any considerable Time out of the Water, its Horns soften, and it is obliged to return to the Water to recover their Hardness: At *Sinking* there is a strange Lake call'd *Dragons*, because when a small Stone is cast into it, the Sky darkens, which is follow'd with Rain, and there is a Noise like Thunder. *Thevenot*.

There is an Herb called the *Sensitive Herb*, which shrinks up and closeth the Leaves, if any Man touches it, as long as he stands by; but as soon as he is gone, it opens the leaves and looks fresh again. *Distroa*, an Herb common in *India*; out of it grows a Bud like that of *Poppy*, wherein there are Kernels like those of *Melons*, which being stamp'd and put into Liquor, makes him that drinks it sometimes laugh like a Fool, without any Sense of what
is

is done before him, and sometimes makes him sleep 24 Hours as if he were dead ; but if in that time his Feet be washed with cold Water he comes to himself. *Linschotten.*

Pegu : There is *Lac*, proceeding from large *Pismires*, which fly upon the Trees, on which there is a Gum ; the *Pismires* suck up the Gum, and then make the *Lac* round about the Branches, which shrink being dried, and the *Lac* remains behind ; it is of a dark Colour ; but being beaten to Powder, they mix all sorts of Colours with it. There is the *Cabriz* or *Blood Stone*, the Virtue of it so marvellous that it is said when the *Portuguese* kill'd a Man who had one about him, tho' they gave him many Wounds he did not bleed till they took it away, to their great Admiration. It is taken out of a Beast which is called a *Caball*. *Atlas.*

Summatra is under the Equinoctial Line ; so that the North Pole is not visible to them, says the Author, and, I suppose, not the South Pole neither ; for they are equally distant, and the Convexity of the Globe intercepts the Sight of them for a few Degrees. This is by some supposed to be the *Ophir*, tho' others say *Malacca* : But it is probable it was hereabout, there being many Names agreeable to the Scriptures : Here are large *Crocodiles*, the *Ichneumons* kill them by stealing into their Bellies (while they open their Chaps to let the *Trochilus* into their Mouth to pick their Teeth) and gnawing their Guts. *Atlas.*

Zeylon or *Ceylon*, a famous Island near the Point of *Coromandel*, or *Cape Comorin* : Here the

the *Cinnamon* Tree abounds, and is smelt a great Way at Sea; it hath a wonderful Diversity; the Bark is the *Cinnamon*; out of the Root they get a sort of *Camphire*, from the Leaves an Oil like that of *Cloves*, out of the Fruit an Oil like that of *Juniper*. The Fruit is like an Acorn, and makes an Ointment like Tallow, good for Aches and Pains; They make of it Candles, Plaisters and Ointments. Here is a Bird like a Swan, but much larger; he haunts Ponds and Rivers to catch Fish. Nature has endued him with such Craft, that the *Alligators* cannot catch him. There is a Spider very large, black and hairy, speckled and glistening, the Body as large as a Man's Fist, and Legs proportionable.

There are large Serpents which will swallow a Roe-buck. A Stag, being catch'd by one of these Serpents, was at the same time shot by an *Indian*, at which he gave such a strong Jerk that he pull'd off the Serpent's Head, whilst his Tail was twisted about a Tree to hold him. There are Elephants very docible; the Keeper thus makes Sport with them: They command one to suck up Water in his Trunk, and holding it till he has a Sign, he will spout out a Pail-full so violently against the Person mark'd out, that he can hardly stand against it. There are Monkeys as large as an *English* Spaniel, having black Faces, and great white Beards from Ear to Ear like an old Man. *Tavernier*.

Isle of *Condore*, N. Lat. 8 Deg. 40 M. There is the *Tar-Tree* which the Inhabitants cut horizontally

rizontally half through, a Foot from the Ground, and then cut the upper Part inwardly down till it meets with the transverse Cut; from thence distils a Liquor into a Hollow made in the semicircular Stump, which boiled becomes good *Tar*, and if boiled more, it is perfect *Pitch*, and answers both Uses. The Tree is three or four Feet diameter; and one Tree affords two Quarts of Juice every Day for a Month together, then dries up and recovers again. *Harris.*

There is a Flower call'd *Syndric-mal*, which serves instead of a Clock. The Nature of it is to open at four o'Clock in the Evening, and continue so all Night. At a certain time in the Morning it closes till four o'Clock again; it grows in the Woods, and they transplant them into their Gardens, to be observed when the Sun does not shine. Grapes grow in this Isle on a straight Tree of a Foot diameter, and have a pleasant Taste: They grow about the Body of the Tree in clusters like *Cocoa-Nuts*. *Atlas.*

Cimbulon Island. There is a Tree whose Leaves, as soon as they fall to the Ground, do move from Place to Place as if they were alive; and if they are touched they presently spring away. This *Pigafetta* try'd, keeping one of those Leaf-Animals in a Desk for eight Days; they resemble *Mulberry* Leaves. There is another sort in *Porto-Rico* (*West-Indies*) a low contemptible thing to look upon; it very near creeps upon the Ground, and seldom is
above

above the height of a Hand from it; when it is touched it strangely shrinks up itself. *Magellan, Atlas.* N. Lat. 8.

Amboyna. There is a very ignorant People, *Heathens* and *Mahometans*. *Mandelslo* says nothing is more frequent than to worship the *Devil*. They reckon three evil Spirits, one subordinate to another; and they have their particular Names. They say they appear in human Shape, when they pronounce their Oracles and reveal secret Things. To obtain an Appearance twenty or thirty Men assemble, and by the help of a small Drum, certain Conjurations, and a Sacrifice of Meat and Drink, make the Spirits appear. And as they believe that what befalls them comes from the *Devil*, they are very careful not to neglect his Worship. *Harris.*

Bouro Island, not far from *Amboyna*. There is a horned Hog, the Body shaped like a Deer, and about as big as a Stag; snouted and tailed like a Boar, footed like a Goat. He has two Horns bended upwards and backwards, about half a Foot long. There is the *Rhinoceros* in the River *Ganges*, near as big as an Elephant, saving that he is not so tall; his Horn is upon the Snout near a Yard long. He fights with an Elephant, and sometimes overcomes him. His Horn, Teeth and Claws, are used against Poison and many Diseases, and sold at great Rates. S. Lat. 4.

Celebes Island. There Spouts are often seen. It is a Cloud hanging down, and sloping or bending,
ing,

ing, never perpendicular. The Sea foams and moves round it, increasing by degrees. After some time it flies upwards, being about 100 Paces in Circumference; but lessening gradually to a smallness like a Spout, thro' which the Sea-Water is drawn up to the Clouds, as is manifest by their Increase and Blackness. Then you see the Cloud drive along, which before was immoveable; the Spout keeping the same Course till the sucking is over, and then breaking off, all the Water below the Cloud falls into the Sea with a terrible Noise.

Dampier.

The *Molucco* Islands. These are most fruitful in Cloves, *Banda* in Nutmegs, tho' other Places have some smaller Quantities. *Banda* consists of six small Islands. Mr. *Mandelslo* says it is next to a Paradox that six small Islands should produce such a prodigious Quantity of Nutmegs as are sufficient for the whole World; only a few others excepted having some; but these Islands are covered all over with them like one continued Forest. Mace is joined with the Nutmeg like a Husk; but it is an Error that has been given out, that Cinnamon, Cloves and Mace, are all of one Tree; in one there is a *Vulcano* which cast up so many Stones as covered a great Part of it, and so many into the Sea as that where was forty Fathom Water there is now a dry Beach.

The *Molucco's* are strictly four small Islands. *Timor* one of them. In this grows a Tree which stinks exactly like human Excrements;

part

part of a Branch of it is in *Gresham College*. But there is a better-scented Tree which produces Cloves, shaped like a Bay Tree. The Fruit is white at first, brown at Maturity, and black when dried in the Sun. The Fruit being very dry, the People cunningly increase its Weight; and the Event is a Wonder. They place a Pitcher of Water under, ten Feet from the Clove-bags, which is sucked up in two or three Days time. There is a kind of Wood which burns like common Wood, but does not consume, tho' you may rub it to Powder with your Fingers. Some account fourteen under the Name of *Molucco's*.

Ternate, another of the *Molucco's*. There is a very high Mountain, which hath a Well on the Top so deep that a Rope of 500 Fathoms did not reach to the Bottom; but none dare drink of the Water by reason of the sulphureous Exhalations. In this and the others there

* So called because they know not whence they come, and suppose they come from Heaven, because their Flight is upward till out of Sight.

is the Bird of * Paradise, a very beautiful Creature of the Bigness of a Parrot, having a long thick Train, and curiously coloured. His Wings are large, and he flies exceeding high; his Feet are small and scarce to be seen, which occasions the Mistake that he has no Feet. There is a Creature called *Cusos*, which feeds upon Fruits, and has a Tail so strong that it hangs by it to get the Fruit. S. Lat. 4 Deg. *Harris*.

Java Island. *Bantam*. Here is Pepper which comes of Seed sown, and in the Growth is supported by Poles, as Hops or Vines. The Pepper

Pepper hangs in many Clusters, four Inches in Length and one in Compass; and these yield each about fifty or sixty Corns. Here is a *Cotton-tree* very remarkable, about a Yard high, like a Briar. At the Top it divides into several small Branches, each of which is charged with many Balls, somewhat like a Walnut, which contain the *Bombast*. When they are ripe they beat out the Cotton with Flails. S. Lat. 7 Deg. *Atlas*.

Here are large Serpents called *Boiguacu*, of which sort there is a Skin in *Gresham College*; towards the Head it is somewhat slenderer than about the middle, where it is half a Yard in Compass; this is almost seven Yards long. I have now at home, saith *Bontius*, a Skin of a Serpent of this kind twelve Yards long, which I killed in a Wood in *Java*; and in that Kingdom was one taken thirteen Yards and a half long, with a Boar in her Belly, of which the General *D. Petrus*, and others, eat a Part boiled. *Job. de Laet* reports that in *Rio de la Plata* there are some so big as to swallow a Stag whole, he says, *quatuor Orgyias longi*. Dr. *Grew*.

The Hogs here are without Bristles, and their Bellies hang down to the Ground. Oysters have been found in those Parts that weighed 300 Pounds; which would seem incredible, says the Author, if there were not to be seen to this Day in the Duke of *Holstein Gottorp's* Cabinet two Oyster-shells which *Olearius* (1657) bought of a Sea-Captain's Wife at *Encluyfen*,

cluyfen, and it weighed 462 Pounds. There is a sort of Canes as big as Poplar Trees, so thick and long between the Knots that the *Indians* cleave them, and make Boats of them, leaving a Knot on each end. *Harris*.

Borneo, a very large Island. Here is the Bezoar-stone, found in the Stomach or Maw of a Goat, and some other Beasts; but that which is taken from Beasts that feed upon Medicinal Herbs is the best, and a most excellent Medicine against Poison. Here is *Civet*, a fine Perfume, formed like Grease in a little Bladder, within the Testicles of a Creature like a Cat. Here is *Benjamin*, a kind of Gum, which being laid upon Fire yields a most pleasant Smell. Here is also *Lignum Aloes*, the most excellent Perfume, which is sold by Weight against Silver and Gold. It is the Wood of a Tree like an Olive, and also the Gum. This, or some other *Aromatick* Gum, was the Aloe of the *Hebrews*, for its Excellence said to be that, *which the Lord hath planted*, Num. 24. 6. whence the other, from its Similitude, hath its Name. This Island is most on the South of the *Line*, and extends to the 6th Deg. N. *Atlas*, Dr. *Grew*.

In this and *Java* is a Creature called *Oran Ootan*, the most like a Man of any Brute. He walks upright, and grows to six Foot high. He has no Tail nor Hair, but as a Man. He will throw Stones or any Weapons for the Hand. Captain *Becknan* bought one, and brought him away in his Ship. He loved strong

strong Liquors, and would open his Case of Brandy, drink some of it, and set the Bottle in its Place. When the Captain was angry at him he would sigh and whine till he was reconciled. He slept as a Man does, with one Arm under his Head; and though he was not a Year old when he died, he was stronger than any Man in the Ship. *Atlas.*

Maldivé-Islands. They are accounted one thousand in Number, and stretch towards the Coast of *Malabar*, by *Cape Comorin*. There is the *Cocoa-Nut-Tree*, very remarkable for its many Uses. It affords a large Quantity of Juice, which being prepared after different Manners, tastes exactly like Oil, Butter, Milk, Sugar and some sorts of Wine. Of the Fruit they make Bread, of the Leaves Paper; and the Trunk serves for building Houses or Ships. There is a Tree called *Sangali*; it puts forth lovely Buds in the Evening and a most fragrant Smell; but they fade at Sun-rise, and it appears in a Mourning Dress all Day long; the *Portuguese* therefore call it *Arbor triste*.

Mauritius Island, S. Lat. 20. There is a Fish called *Man-atee*, which useth both Elements; its Fins serve for Stilts at Land, as they do for Oars at Sea. It delights in beholding a Man's Face, and is valuable for a Stone found in the Head, which being pounded and drank in Wine fasting, cures the Stone and Cholick. Here are Bats as big as Crows, and their Heads like a Fox's. They sleep hanging on Trees by little Hooks at the Joints of their Wings.

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Here

Here are Birds so small that their Body does not out-weigh two Bees, and they sing to Admiration almost as loud as a Nightingale.

There is the *Torpedo* or *Cramp-Fish*, which catcheth lesser Fishes very strangely, by his natural Coldness. He hides himself in the Mud, and benumbs such Fish as swim over him. When himself is taken, he affects the Hand of the Catcher with a sudden Trembling and Numbness, by evapourating a cold Breath. There are here other strange Fish, some in the Shape of Hedge-hogs, others of Cats, some round, some triangular.

Manila, an Island belonging to the *Spaniards*, betwixt Lat. 14 and 19 Deg. North. Here are Flying-Cats with hairy Wings, by which they fly from one Tree to another. There are Serpents of a great Length, that hang by the Tail on Trees, draw Men and Beasts with the Force of their Breath; and the only way to prevent it is, to beat the Air betwixt them and the Serpent; they are call'd *Ibitin*. And there is the Woman-Fish, so called because it hath Breasts like a Woman's. *Atlas*.

Malacca, a *Peninsula* adjoining to *Siam*; upon the Point is a City of the same Name, $2\frac{1}{2}$ Deg. L. N. Here *Albuquerque* took a Ship, in which a Man was sore wounded, yet lost no Blood as other wounded Men did: But upon pulling away a golden Chain, he died by Loss of Blood. This Effect is attributed to a Bone taken from a Beast called *Cabis* in the Kingdom of *Siam*, which Bone was included in the golden

den Chain. They say that Nature hath endowed it with a very potent Restringerency, which forcibly keeps in the Blood in the several Channels, tho' it had so many Vents to run out at. This Chain was sent to *Portugal*, but lost by Shipwreck. *Harris.*

Isle Sombrero. There is a Plant here, the use of it not known, yet hath a strange Quality. It is like a small Tree; if you offer to pull it up, it contracts itself and sinks into the Ground, unless you draw hard enough to prevent it. If you force it above Ground, you find a great Worm lying at the Root, and so closely united to it as if it were a Part of the Plant. As this Worm grows less the Plant grows bigger, and when the Worm is consumed the Plant is fixed and becomes a small Tree. When it is come to Maturity, if you strip off the Leaves and Bark, and lay it to dry, it petrifies into a strong Body hardly to be distinguished from white Coral. *Harris.*

Bramport, in the *Mogul's* Empire, above *Surat* in the same River. There is a strong Castle, and hard by stands an Elephant carved in Stone so much to the Life, as well as in all exact Proportions of that Beast, that another Elephant which came one Day to drink there mistook it for a real Animal, and accordingly run against it with all his Force, and broke both his own Teeth, but could make no Impression upon his Adversary. Here is a great Trade in Callicuts and Cottons, there being great Plenty here of Cotton-trees. *Mr. Finch.*

Hassanabdal. This is in the Road to *Labor*. Here are extraordinary Ponds; the Drops of Morning Dew are not purer than the Water of them; but the pleasanter Spectacle is that of the Fish, which have golden Rings hanging in their Snouts, and may easily be seen with their Ornaments playing up and down, by reason of the perfect Clearness of the Water. This was done by the Emperor *Ecbar Sha*, who it seems was resolved that Ponds so rare and fine should have Fish every way as extraordinary. *Harris.*

Labor, Lat. 32. Lon. 74. 'Tis on the River *Ravy* that runs into *Indus*. There is a noble Road, like a Gravel-Walk, from hence to *Agra*, above three hundred Miles long, finely planted with Trees; which Mr. *Corriat* walked over. Here the *Mogul* has a fine Palace, and keeps his Residence during the cold Season. It was once the chief Mart of *Indoston*, when Merchants traded by Land to *Aleppo*, and then a large City; but it is much decayed since the *Europeans* found the way by Sea to the *Indies*. *Agra*, Lat. 27, 31. is a great City. Here the *Dutch* have a Factory; but the *English* left theirs because it did not turn to Account. *Tavernier.*

Indoston or *Mogul*. Here are many Elephants; they go twelve Months with their Young; they live the usual Age of a Man, and 'tis thirty Years before they come to their full Growth. They are easily managed by a Governor, who uses only a small Rod of Steel crooked

crooked at the End like a Hook; upon the least Twitch or Pull the Creature obeys. A Boy of twelve Years may do this Office, and rule the biggest Elephant, provided it be not in their Madding-time, when the Males desire the Female, and then they are made to stand still by a Flash of Gun-powder, and they tremble at it.

At *Asmere*, where the *Mogul* then resided, one of his Elephants used to be led through the Market, and as he passed, an Herb-woman used to give him a Bunch of green Herbs. This Elephant in his hot Fit broke from his Keeper, and took his Way through the Market. Among others the Herb-woman ran for't, and in the Fright left her young Child; there the Elephant stop'd, takes up the Child tenderly, and lays it down without any Hurt upon the Stall of a House; having done this sober Action and thus expressed his Gratitude to his Benefactress, away he ran as mad as he was before.
Harris.

It is very common here to teach these Creatures and so to manage them that they will take up young Children in their Trunks, and toss them and swing them about for their Diversion and Delight, and then set them down with as much Care and Tenderness as their Mothers would have done. The *Great Mogul* once made his own Son, a young Prince of seven Years old, be thus tossed by one of his Elephants, and, after that, the Children of several Nobles; and none received the least Harm.

From these Instances and many more a Man may see Reason enough to disagree with a *Cartesian*, with whom these Creatures are only a Piece of Clock-work; and may learn to acknowledge the Presence of a more noble Principle that determines their Motions. *Roe, Harris.*

An *English* Mastiff boldly attack'd one of them, and fastned upon his Trunk. The Elephant having swung him up and down a great while, at last threw him off a considerable Distance, and was glad to get rid of him. This was one of the Dogs presented by the *English* Merchants to the *Great Mogul*, who was extremely pleased at the Story, and thereupon the Dogs were well treated, had each four Men to attend them; and the *Mogul* had a Pair of Silver Tongs made on purpose that he might feed them with his own Hand. An Elephant is a wondrous Creature, and yet the Hand of Nature is as admirable in the Structure of a Fly.

An Elephant will manage himself towards any Person, according to the private Instructions given him by his Keeper: If he is order'd to fright a Man he will run to him with a seeming Fury, as if he meant to tread him in pieces, and when he is at him do him no harm at all. If he is bid to abuse or affront a Man, he will take up Water or Dirt in his Trunk, and dash it in the Man's Face. The King of *Achen* uses Elephants as Executioners of his Punishments, which they will perform according

ding to Order, and the Degree of the Offence, by tossing only, or beating or killing. *Tavernier, Atlas.*

There was an Instance in a *Dutchman*. It is a Law at *Achen*, that none must come ashore till the King sends his Licence. The *Dutch* Resident presuming upon more Favour than it seems he had, brought a General of his own Country ashore without the King's Leave; which being known, the King sent for the Resident, and had him well toss'd by an Elephant as a Punishment for his Presumption; the Fright was more than the Damage, and the *Dutchman* told the King it was a mild Correction; yet he pack'd up and left the Place, being resolv'd to have no more of the King's fatherly Correction, nor to be toss'd again into his Duty by those surly Executioners. *Harris.*

White Elephants are in high Veneration among the *Indians*, derived from the Impostor *Xacca*, the first Founder of their Idolatry. The History of his Life relates, that his Mother, being big with him, dream'd that she had bore a white Elephant. This Fable is the Occasion of that so great Passion which the Kings of *Siam*, *Tonquin*, *China* and *Pegu*, have for white Elephants, that they believe themselves very happy when they can procure one; and he that hath one styles himself *King of the White Elephant*. The *Brachmans* say that *Xacca* had suffer'd the *Metempsychosis* 80000 times, and that his Soul had pass'd into so many Beasts, whereof the last was a white Elephant, and after

that was received amongst the Gods. *Kircher, Collier.*

The Opinion of Transmigration is maintain'd by their Philosophers, the *Bramans* and *Banians*, and believed by the *Pagans*; upon which Account they will redeem any Birds that are catch'd by the *Mahometans*. This Opinion preserves the Apes and Monkeys, so that they are as common as Dogs and Cats with us, and come freely into Houses, and take what is given them. Mr. *Mandelslo* says he counted no less than fifty together in the *English* Lodge at *Brampour*, and used to give Almonds and Dates to some of them, which made them attend duly every Morning at his Chamber Door in Expectation of their Breakfast, which they wou'd take out of his Hand. Sometimes, says he, I used to catch hold of one, which made the rest snarl till I had let go their Companion. *Harris.*

In the Country round about abundance of *Indigo* is made from an Herb much like our Hemp, which is sown after the Rains: They cut it three times a Year; the first cutting is the best, and the second better than the third, known by the Briskness of the Colour: They cast it into Pits half full of Water, which they raise to the Brim with the Herb, and then pound it about till it becomes as thick as Mud; they let it settle for some Days, and afterwards drain the Water out of it, which done they take it up in Baskets, and having made it up in Lumps, flat at the Bottom and sharp at the
Top,

Top, they set it in the Sun to dry. *Tavernier, Mr. Finch.*

Cachimire, a Northern Province, a noble Country; it resembles a Garden of Ever-Greens; the Natives excel in Varnishing and making Stuffs; the Capital has the same Name, North Lat. 35. Here is a Fountain, which, in the Month of *May* flows and stops three times a Day regularly for fifteen Days together, *viz.* at Break of Day, Noon, and Night; its Flowing fills a Square of ten or twelve Feet broad, and as many deep, and then it slackes by Degrees till about the End of the Month, and then quite stops for the rest of the Year. *Bernier* speaks almost the same, but says it issues from a Mountain that is cover'd with Snow, which feeds as the Snow melts, and that Rains make it run at other times; yet these Causes are not sufficient for other Springs. *Atlas, Tavernier.*

Cabul is a Kingdom of *Indoston*, and the chief Town hath the same Name; it is the farthest towards *Persia*, having *Cachimire* on the East. The Town stands upon the Road from *Labor* to *Samarcand*; there is a great Trade for *Musk*, *Silk* and *Rhubarb*, and other Goods from *Cathai*. In this Kingdom the Rivers *Nilab* and *Bebal* have their Sources, and fall into the *Indus*. At *Azmer*, a Province adjoining, there is a Beast snouted like a Fox, but no bigger than a Hare, having Teeth like a Dog, and the Colour of a Stag; it yields excellent *Musk*, from a Bladder in the Belly, full
of

of Matter like corrupt Blood, yet that is the *Musk*; they cut off the Bladder for it, but the Beast lives not long after it. *Tavernier*.

Near *Baramoulay* there are Mountains, in which there is a Lake that hath Ice in Summer, and looks like an Icy Sea. A little further is a Place, where making a great Noise will presently cause a Shower of Rain: There is a bubbling Fountain which rises gently and with some little Force; for a while it makes small Bubbles, and brings up Sand with it, which goes away again, and the Water becomes still, and so remains a while without bubbling, and then rises again as before. Here is a kind of Pullets, whose Skins are all over black, as are also their Bones, but their Flesh is very white, and their Feathers of another Colour; the Children go naked only with a Bit of Cloth to cover their Privities; they marry at eight or nine Years of Age, and bear Children at ten. *Tavernier*.

At *Calamac* there is a Spring of very cold Water issuing out of a Rock, that continually belches out Flames; and the *Bramins* make a great Advantage by the People who come to see the Miracle. There is the *Mango*-Tree, as large and stately as our *Walnut*-Trees, and the Fruit in Shape and Colour like our *Apricots*, but much larger, and highly grateful to the Palate. The *Annana* is the choicest of all their Fruits, and tho' it is very delicious, hath so compounded a Taste that a Man, while he eats it, may imagine that he eats several fine Things

Things together ; they say it resembles a Mixture of *Strawberries, Claret, Rose-Water* and *Sugar*. Sir *Thomas Roe*.

There is a Tree, which the Author says he could not learn the Name of, but he calls it the *Spreading Tree*; I suppose it is of the same kind, which elsewhere is named the *Banian*; it spreads it self round into a vast Compass, and forms a kind of *Pavilion* capable of entertaining several hundreds of Men under the Shade and Shelter of it : In this Country it is most common, and also most useful, where the Heat is very troublesome by Day, and yet the Nights are very cold. Nature has admirably well provided for the Occasion, in raising such a Tree as this; it is as good as building so many Inns upon the Road; nay, in some respects better, since these will entertain more Passengers, and a Man is at no Trouble nor Charge for a Lodging. *Ibid.*

The Empire of *Mogul* extends from *Cape Comorin* in the South to *Tartary* in the North 1620 Miles, the greatest Breadth from East to West 1000, most of it between *Indus* and *Ganges*: But there are several Kingdoms included, which are govern'd by Kings, and Tributaries to the Great *Mogul*. The River *Ganges* is accounted sacred, and thought to wash away Sins; Multitudes come from *Tartary* and elsewhere for that End, and cry out, *O Ganges, purify me*: They dip their Sick in it, in order to recover Health; and if they die soon after, they think they are happy. The
Water

Water is transported for the same ends to those who live at a distance, and are not able to come to it. These Opinions set forth one Wonder, that is, The Greatness of Error that corrupt Nature leads Men into, and the Easiness of Mankind to be led into Error, when they will not use their Reason to oppose their natural Corruption.

Cochin is 40 Leagues North off *Cape Comorin*. *Baldæus* gives an Account of *St. Thomas* being in this Country, of whom the People have a Tradition, and he thinks it not improbable, that he planted Christianity here and in *China*; from whence he returned to *Meliapour*, and there suffered Martyrdom. They are now relapsed into *Paganism*, and there are only some few named *Christians* that are tainted with the *Nestorian* Heresy. At *Cranganor*, sixteen Leagues North from *Cochin*, in the Kingdom of *Malabar*, the Women go stark-naked; yet they make fine Linnen, and are very dextrous in whitening it. They shew a good Sense in many Things, but seem to want good Reason, because they will not use it as they ought.

In other Parts of *India* both Men and Women go naked, yet have so much Understanding as to retain the natural Modesty, and are ingenious to hide their Shame. The Women have an Apron of curious Work to cover the *Pudenda*, one of which is kept amongst the Rarities of the *Royal Society*. It is a quarter of a Yard deep, and shaped like a Widow's Peak;
hath

hath two transverse Labels, with several tassell'd Strings to tie it about. It is made of Rushes of several Colours, woven in Squares and half Squares; the Inside of smaller Rushes all of one Colour, and the Weaving different from the other Side, as some Silks are of different sort of Weaving; a Work which an *European* could hardly imitate; and so nice a Cover that some have taken it for natural, and the People for another Species of Mankind; which Unbelievers, not less abusing their own Reason, have applied to defend their Scheme.

In the Country about *Cochin* there are *Angelina-trees*, the Timber of which is more durable and harder than Iron, and so large that of one Piece of a Trunk they make Skiffs that will carry twenty or thirty Pipes of Water. Here are also Sugar-Canes and *Bamboos* very tall, as thick as a Man's Thigh, and their Pith Medicinal. There is the *Toddy-tree*, which yields that famous Liquor so called. It is as thick as a Man may clasp it with his Arms, straight and tall, without Boughs to the very Top; but hath a rough Bark, which gives Assistance to the Climber, and the Natives mount them with incredible Celerity. The Liquor distils from the Branches upon making an Incision. It is a delicious Wine, as smooth as new White-Wine, but much more fine and clear. It provokes Urine, and gives Relief in the Stone. Sir Thomas Roe.

Curwar, thirty-six Miles S. from *Goa*. Here the *English* have a Factory upon a Branch of
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the River, over-against a pleasant Island full of Game. Dr. *Fryer* says the best Pepper in the World grows hereabouts, which was the Reason of our Settlement; and there is Abundance of *Cassia-Lignum* or *Bastard-Cinnamon*, and *Nux-Vomica*. Here are Fowls of the Size of a Pigeon called *Bill-Birds*, because of the largeness of their Bills, which are of several Forms and Colours, and make excellent Flasks for Powder; the small ones being large enough to hold half a Pound. There is Abundance of Red-Deer and other Game; but the Woods are infested with Tigers and Leopards. Sir *Thomas Roe* was Ambassador from King *James I.* to the *Great Mogul*, and obtained Places of Settlement for the *English* Merchants. *Harris.*

Cananour, N. Lat. 26. on this side *Ganges*, Capital of a Kingdom: Here is a Mine of Stone called *Azaximit*, of the same Virtue with the *Terra Sigillata*, valued all over the *Indies* as an Antidote against Poison, and for the Cure of Fevers, Fluxes and Indigestions. From hence S. W. is *Chitor*, under the Tropick of *Cancer*, said to be the Seat of King *Porus* whom *Alexander* vanquished, and generously restored to his Kingdom. It was ruin'd by *Aurengzebe*, and now the chief Town of the Province is *Chitpour*, where they make great Quantities of those Callico.s called *Chites*. The Country abounds with Lions, and the Natives have a dexterous Way of taming them. The City *Chitor* was once so Noble that it was called *the Umbrella of the World*. *Tav. Atlas.*

Canara

Canara is adjoining to *Cananour*. Here the Wives are so hardy that they never use a Midwife; and are no sooner delivered but they wash the Child themselves, wrap it in a few Fig-leaves, and then go about their Business as before; which makes them so hardy that they commonly live to 100 Years. They are under no Obligation to burn themselves with their dead Husbands, as their Neighbours of *Bengal* do. But there is a strange Custom among the Men at the Celebration of their great Feast: Their Idols are carried in Triumph on Carts adorned with Flowers; the Wheels have great Hooks fastened to the Spokes; and such as are minded to signalize their Zeal, cast themselves upon the Wheels to turn with them, and so are torn in Pieces; others lay themselves upon the Ground to be crush'd to Death by the Chariot; because they think to become immortal for undergoing that Death for the Glory of their Gods. *Dellon, Atlas.*

There is a Mountain near *Bellaguate*, wherein is the principal Mine of Diamonds; no Part of the World affords greater Plenty, or of a better Water, which is the Lustre of precious Stones. If a Diamond exceeds twenty Carats, that is, eighty Grains, it belongs to the King. There is a very strong Castle named *Haffer*, being built upon the Top of a steep Mountain, that is so large and fruitful as to lodge and maintain 40000 Men. It hath Plenty of Springs, and could never be conquered, were it not that such Worms as often prove Mortal, breed in the
Thighs

Thighs and Legs of those that drink the Water; by which Means alone *Ecbar* the *Mogul* took it. *Herbert.*

There is a City called *India*, altho' at a great distance from the River *Indus*. It is upon an Island in the River *Menam*, and in the Kingdom of *Siam*, the ordinary Residence of the King. It is adorned with many Temples and Palaces; of the first whereof there are above 300 within the City, distinguished by their gilt Steeples or rather Pyramids, and afford a glorious Prospect at a distance. The River *Menam*, like the *Nile* formerly, has its Source still undiscovered; being of so great length, and so far North; and now, like the *Nile*, overflows the Country five Months, and renders the Rice-Fields very fruitful. It hath also several Mouths, by which it falls into the Gulph of *Siam*. The best Channel is the Eastern, Lat. N. $13 \frac{1}{2}$. And the City of *India* is twenty-four Leagues from the Mouth, about 14 Deg. N. Lat. *Mandelslo.*

Siam, N. Lat. $14 \frac{1}{2}$. There is the best *Benjamin* in the World, and great Plenty. It is a Gum that issues from a high small Tree, spreading with fruitless Branches; the Leaves somewhat like Olive. The Gum supplies its want of Fruit, which is a rich Perfume, very pure, clear, white, some yellow and streak'd. *Herbert.* Part of this Kingdom is *Malacca*, a long narrow *Peninsula*, separated by a Streight from the Isle of *Summatra*. The Coast is infested with a poisonous Fish called *Sea-Apples* and
Sea-

Sea-Qualms, which are dangerous to those that wash in the Sea, and cause Inflammations wherever they touch. But on Land at *Patana* are Ducks that lay twice a Day, and Turtle-Doves with as fine Feathers as the best Parrots. *Atlas.*

Bengal is a Kingdom under the *Mogul*, bordering W. upon *Siam*. It is bounded to the South by the Gulph of the same Name, into which the *Ganges* empties itself, after it has run fifteen hundred Miles on the East-side of *Indoston*, which is included on the West by the famous River *Indus*; which two Rivers have their Sources nigh one another from a Mountain in *Tartary*. There *Plantans* grow in Clusters, of a long Shape like a slender Cucumber, very yellow when ripe, and taste like a *Norwich-Pear*; but much better. On the Coast, *Bernier* says, he saw a sort of Fish with a Bladder hanging out of their Mouths full of Air and reddish at the End; and he observed several Lunar Rainbows. *Roe, Harris, Atlas.*

Cochin-China in a broad *Peninsula*, East from *Siam*, West of the Bay of *Tonquin*. There is the *Calamba-tree*, which is so fragrant one may smell it, tho' buried a Yard and a half under Ground; these are engrossed by the King, who sells the Timber at a great Price, in his own Dominion at sixteen Ducats *per* Pound; it is sold at *Japan* for two hundred Ducats *per* Pound, because the King and the Nobility use Logs of it for Pillows. Here are Elephants so large and strong as to carry great Wooden Towers, to which the Natives

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fasten

fasten strong Sythes, whereby they cut down Woods. Instead of Wine they use a Liquor distilled from Rice, which the richer sort mix with Water distilled from the *Calamba*, that gives it a delicate Flavour. *Atlas.*

In the North-part of *Cochin-China* there are abundance of *Baniam* or *War-trees* planted in the Roads, some so large that three thousand Men may stand under them; they bear a Fruit

* *Vesper-tilio* the Bat is called the *Rere Mouse* or *Flitter-Mouse*, the winged *Mouse*, which appears only at Night, as it were in the *Rere* of winged Animals. as big as our large Nuts, on which the * *Rere-Mice* feed, which here are of the Size of Pullets, and have seven Claws in each Wing. There is a Tree called *Gogaviar*, which resembles a Laurel, and bears an excellent Fruit, which is astringent before ripe, and the contrary after. They have a way of preserving Eggs two or three Years, by wrapping them in a kind of Paste. They have no Cats in this Country; but Dogs hunt and kill Rats and Mice, which are large and very troublesome. *Atlas.*

Hainan, a considerable Island in the Bay of *Cochin-China*. There are more Pearls found than in any other Place. The *Indian* Nut, called *Jacca*, grows here plentifully, not on the Branches, because too weak to bear it, but on the Body of the Tree. They are to be open'd with an Ax, and out of its several Cells a yellow Pulp is taken, which hath the Taste of a Chesnut. But the Wonder of all is the Plant called *Chifung*, which foretells Storms by the Knots on the Root of it; the Seamen reckoning the Number and Distance of

of the Tempests by the Number and Distance of the Knots. Hereabout are excellent Tortoises, which the Natives pickle and sell to a great Advantage. *Martin, Thevenot.*

Chintu, in the Province of *Suchuen* in *China*. Here is a strange Bird called *Tungboafung*, having a red Bill and Feathers of divers Colours; which is engendred of a Flower called *Tungboa* and lives but while that lasts. Near *Nui-kiang*, a Town dependent on this, there is a Well, whose Water rises and falls according to the Ebbing and Flowing of the Sea, though far from it. Nigh the City of *Quon* is the Mountain *Chinching*, where the *Chinese* say the *Xinfiens* meet frequently, whom they hold to be immortal Men. Near *Cungking* upon Mount *Toyung*, are Monkies that resemble Men, and are little less than they. *Thevenot, Collier.*

Brema, an inland Town, N. Lat. 20. In the Country there are Mines of Precious-Stones, Agat, Diamonds, &c. and certain Herbs, whence Silk is said to be drawn. There is an Herb called *Petfi*, which is a kind of *Lanifer*, having a Down like Wool. It grows under Water, and the Root is fastned to white Matter cover'd with a red Skin, that divides it into several Heads, which taste like a Nut; it is said to have this Property, that it softens Brass, and renders it eatable, being put into the Mouth with a Piece of the Plant. There is an Animal like a Man, but all over hairy; it feigns a Laughter, and whilst Travellers listen to it, sets upon and devours them. *Le Compte, Atlas.*

The Wonders of Nature

Civenchen in *China* is famous for the Bridge *Loyang*, built upon the River of that Name. The World is hardly able to match this sumptuous Work, being three hundred and sixty Perches long, and one and a half broad, supported by three hundred great Pillars instead of Arches, with acute Angles to break the Force of the Water; five great Stones take up all the Breadth from one Pillar to another, and each of the five eighteen Foot long. It is railed on both Sides with Figures of Lions and other Ornaments; and this is but one Part of the Bridge, that ends at a Castle; on the other Side of which is another Part almost as long as this, and built the same Way. This is in the Province of *Fokien*, where the *English* have a Factory. *Thevenot, Atlas.*

Japan. There is a huge Image of Copper that stands in the Road, to which the *Japoneſe* pay their Devotions as they go this way; it is in the Shape of a Man kneeling upon the Ground, yet his Height from the Knee is twenty-two Feet, and all the Body proportionable. Some of our Men (ſays *Saris*) went into the Body of it, and there hooped and hollowed, the Noiſe of which, out of the wide Mouth of the Image, was ſuch like agreeable Muſick I believe as was made by *Phalaris's* Brazen Bull. The Name of the Idol is *Dabis*; and there is another named *Ammida*, of which it is ſaid there is not a more ugly Figure in Nature; yet ſuch is the Peoples Superſtition, they believe his Name will procure Happineſs. *Atlas Historique.* *Jeddo*

Yeddo or *Eddo* is the chief City of *Japan*, N. Lat. 36. *Saris* says it is bigger than *London*, taking in all the Suburbs; but he must mean the Villages that are near to it, otherwise he would not agree with other Accounts. There are many noble Buildings, the Tiles of the Houses gilded, and the Posts set off with shining Varnish. But *Yedzo* is one of the Islands and the most Northern Part, of which no farther is yet known than Lat. 51. The People are more human in Temper than in outward Aspect, being all over rough and hairy almost like Monkeys, yet is their Skin white and clear. Farthest North there is a People which seems to be different from the rest of the Island, and of quite another Race, being so extremely low and short that they may be called *Dwarfs* in a strict and proper Sense. *Saris, Harris.*

Linga-Island under the *Æquinox*. Here the Tide flows twelve Hours and ebbs twelve Hours; as also at *Banca* near *Summatra*. At *Summatra* and *Bantam* in *Java* their great Drink is Arrack, which is distilled from Rice, first steeped in the Liquor of the Coco-tree. This Tree affords Wine, Bread, Oil and Vinegar; it is said to serve almost to all Uses. The Wine is from the Tree itself; the rest made from the Fruit, which is a kind of Nut as big as a Man's Head. It hath two Rinds full of Strings and Threads, of which they make Cords; bread is made of the Kernel. Some of those Trees yield thirty Quarts of Liquor

in twenty-four Hours; but if drained too much they perish. Here Sailors are obliged to wait some time for the *Monsoons*.

The *Monsoons* are periodical Winds, which blow half the Year one Way, and as long on the opposite Points, commonly East and West; but there is sometimes a Variation. In these Parts the Sea always runs Southward from the Beginning of *November* to the Beginning of *April*, and back again Northward from *April* to *November*; and the Winds for the most Part observe the same time and Course. On the Coast of *Arabia* it holds between five and six Months. When the Easterly Winds have done their Parts, after the Interval of three or four Weeks calm and fair Weather, the Westerly Winds begin to come on; so that these two *Monsoons* (with the little Intermission between) fill up the Compass of the Year. There is no Rain falls on the Coast of *Arabia* till the seventieth Day of the East-Monsoon. *Keeling*.

In sailing to the *East-Indies* there are several Observations. The *Equinoctial-Line* is to be noted, and it is called the *Line* by way of Excellence. It is the chief Circle of the Sphere, cutteth the *Meridian* at right Angles, parteth the World into the Northern and Southern Hemispheres, and is in all Points equidistant from the Poles of the World. It hath the primary Respect to the Heavens, and its correspondent Circle upon the Earth, or upon the Terrestrial Globe, is more usually called the *Equator*. The *Meridian* is that Circle which,
passing

passing by the Poles of the World, cutteth the Horizon at right Angles, and divideth the World into the Eastern and Western Hemispheres.

The *Equinoctial-Line* is so called, because the Sun crossing it twice a Year, namely about the tenth of *March* and tenth of *September*, makes the Day and Night equal, by reason of his equal Stay above and below the Horizon. The Sun's Heat is strongest when he is perpendicular, or right over one's Head, which is called the *Zenith*, his Beams falling directly down; yet the Air is more temperate about the *Line* than under or near the *Tropicks*; because under or near the *Line* there are two Winters, and the Nights and Days being equal, the Length of the Night cools the Air, and the Sun passeth lightly through the Degrees of the *Zodiack* betwixt the *Equinoxes*; but when he comes near the *Tropicks*, he makes the Days longer than the Nights, and stays longer on the Degrees of the *Zodiack* at or near the *Solstice*.

The *Tropicks* are two Circles parallel to the *Equator*, and equally distant from it twenty-three Degrees and a half; they are described by the Sun, the one when he goes farthest Northward, called the *Tropick of Cancer*, and the other when he goes farthest to the South, called the *Tropick of Capricorn*, because then he enters those Signs. The Word *Tropick* comes from the *Greek*, signifying as much as *to turn*; for the Sun coming to either of them proceeds no farther; but returneth back

towards the *Equinoctial*. And those Points are called *Solstices*, because the Sun seems to stand a little, whilst his Breadth passeth and presently repasseth the same way; so that for about three Days each way there is small Difference in the Length of Days.

Between the *Tropicks* is the *Zodiack*, that broad and moveable Circle, which obliquely crosseth the *Equinoctial*, and, thence touching the *Tropicks*, is noted with those twelve Constellations called *Signs*, and severed all along in the midst with the *Ecliptick*; it is called *Zodiacus* from the *Greek* Verb, signifying to live; because the *Asterisms* or *Constellations* are usually painted therein in the Forms of living Creatures. The *Zodiack* hath its Poles, upon which are made the Revolutions of the second Moveables from West to East, and first of the Sun it self, which because it moves upon the *Ecliptick*, they are commonly called the *Poles of the Ecliptick*; the other are the *Poles of the World*, and of the *Primum Mobile*:

The *Zodiack* is discerned to be a broad Circle, because the Planets being therein moved, do not always keep the same Way; only the Sun remains constantly in the midst thereof, namely upon the *Ecliptick*. The *Ecliptick* is so called, because the Eclipses of the Sun and Moon happen in it, and it shews the Eclipses, because, making their Course upon this Line but differently, sometimes they are in Conjunction, with respect to us, and sometimes in Opposition. After this manner we speak, as agree-

agreeable to the Sun's Motion, and proper to the Use of the Globe; but the same Observations may be conformable to the Motion of the Earth.

The *Latitude* is reckoned from the Equinoctial Line towards the Poles on each side 90 Degrees, which towards the North are called *North Latitude*, and towards the South Pole, *South Latitude*. The Latitude of any Place is shew'd upon the Globes, in the Degrees of the great Meridian. The Elevation of the Pole is always equal to the Latitude of the Place. *Longitude* is the Distance of a Place from the first Meridian, reckoned in the Degrees of the Equator, beginning at St. Michael's Island in the *Azores*, according to *Mercator* and other Geographers; but Opinions being various about the first Meridian, we now place it at *London*.

The *Atlantick* Ocean is so named from *Atlas*, a Mountain in *Africa*, which stretches out a Promontory on the Sea Coast. In this Sea are often seen several remarkable Appearances. Sometimes there is a *Phænomenon* called a *Flame*, which appeareth when much Exhalation suddenly burns, and is stretched out in length and breadth; in the Night its Brightness equals the Clearness of the Day. It is a Sign of Drought. There is a kind of Fire called *Leaping Goats*, which move about like Goats; and they signify an unconstant Constitution of the Air. There is the *Burning Spear*, which is immoveable, and signifies a bad Air.

There

There is a perpendicular Fire, which signifies Drought.

There is a *Flying Star*, which is an Exhalation stretched out in length, and not very thick; it moves swiftly, inclining downward, and signifies Drought. There is the *Flying Dragon*, the middle Part whereof is like the Belly of a Dragon; and the two Extremes of the Head and Tail are like those of a Dragon; not only for these it is so called, but also because it seems to spit Sparks of Fire. There is an Appearance called a *Right Line*, which is expressed in a long dewy Cloud, imitating the Colours of the Rainbow, and like this it signifies Rain; there is sometimes a Rainbow of the Moon, which signifies a long Storm.

About the *Equinoctial Line*, and forward towards *India* there is great Plenty of Flying Fish, of which something has been said before; they are about the Bigness of an Herring, their Back somewhat thicker, and the fore Part of the Head round, like the *Pocket Fish*, with Wings much like those of a *Bat*. The *Bonitoe* is good Meat, about the Bigness of the largest *Carp*; they have no Scales, but the Skin a little silvered, and the Back marked with long, obscure and gold-like Streaks. *Albicores* are so called from their whitish Colour; they are a kind of *Bonitoe*, but three times larger than the other; both of them are great Lovers of the flying Fish; and if one make a thing like it, tie it to the End of a Rope, and make it dance above the Water, they will snap

at it so greedily that they are easily drawn aboard.

Near the *Cape of Good-Hope* the Sea is seen to boil like a Pot upon the Fire. This Motion was about a Musket Shot in length, and the breadth of a Ship, and all this Space was cover'd thick with Weeds, which, says the Author, they pass'd over by main Force without any Danger. In those Parts it is useful to observe the *Crozier*, which is thirty Degrees above the South Pole; it consists of many Stars, which some call the *Croziers*, whereof the Chief are so disposed that they make a kind of Cross, the biggest of them 27 Degrees from the Pole; by these Seamen steer their Course, and sometimes take their Latitude, as we do in our Hemisphere from the North Star. *Leonardo.*

In some Places between the *Cape* and *Madagascar*, the Sea is all cover'd with Worms, which shine in the Night like Candles, and those cursed Vermin, says the Author, taking to our Ship, eat their Way so far into her every where under Water, that is, from the Keel to that Part which is even with the Surface of the Sea, when laden, that were it not for pounded Glass and Cows Hair, used in the Sheathing, our Vessel had sunk; however Rotteness following that Havock, the Water standing in the Holes these Insects had made, which ran athwart one another in the Planks, our Ship was judged unfit to return to *Europe*. *Francis Caucke, p. 10.*

In

In those Southern Parts, both at Sea and Land, Thunder and Lightning are more frequent and more violent than Northward, because the Sun hath greater Power. The Sun exhales moist Particles, these condense and gather into Clouds, when these Clouds enclose some fiery Exhalations, extracted from Sulphur and Nitre, both out of Earth and the Ocean, this produces Lightning with Thunder, which breaks out like Gun-Shot, *qua data Porta*, where the Passage is most easy, and the Cloud not able to make Resistance. This according to its Strength doth harm, and is stronger as it falls more directly downward. It hath divers strange Effects, but it hath also some good Uses, *viz.* to clear the Air, to break the Clouds and send down Rain upon the Earth.

But why was Thunder created or permitted to do Hurt? There are certain Laws of Matter and Motion, which God hath ordained and stamp't upon his Creatures, with some respect to Man's sinful State, to give him Warnings, and to make him fear the Great God: *For the God of Glory thundereth, the Lord is upon many Waters, that is upon the Clouds*, Psal. 29. 3. *The Clouds are called Waters*, Gen. 1. 7. These are the Waters above the Firmament, not the high Heavens, but above the Air; the *Hebrew* signifies Expansion, and those Waters are above the grossest Part of that Firmament, being supported by it, and it is also called the Heavens,* *The Lord thundered in the Heavens; his Pavilion round about him was dark Waters and Clouds*

* Psal.

18. 11, 13.

Mat. 24.

30.

of the Skies; they are also called the Clouds of Heaven.

Now Natural Agents cannot suspend their Influence, nor stop their Activity, as if they were voluntary, but strike without Distinction whatsoever happens to be in their Way; they must follow the Course of Natural Causes, and the Laws settled upon them, which never meet with a dispensing Power but by a Miracle: Yet God so governs the Elements as to give Ground to our Prayers, and room for his kind Protection. There is some Wonder in it, that so few are hurt by Lightning, and that may be ascribed to a good Providence: He may keep a Reserve in his Hand, to stop the Course of Nature upon extraordinary Occasions, and that is properly a Miracle, such as we find in his Word, to testify his great Truths; but that God should destroy all natural Causality, and govern the World by Miracle, is an unreasonable Expectation.

It may be again asked, Why does not God use his Terrors to distinguish and punish wicked Men? Thunder was not design'd to execute Vengeance and to forestall the Day of Judgment, but rather to assure us of it, because it makes no Distinctions. It must break out that Way where it finds the least Opposition, and naturally cannot strike any thing but what stands in its Way, whether it be Man or Beast, a wicked or innocent Person. To expect more would be to require that God should miraculously direct its Stroke at all Times, to
make

make Examples of notorious Sinners, and this wou'd be to supersede the Course of Nature, and govern the World by Miracle. One might as reasonably expect a Hand out of the Clouds to pull Men by the Ears, when ever they offer'd to offend; but this wou'd be such a Force upon free Agents that both Virtue and Vice wou'd be swallow'd up in pure Necessity.

The Effects of Lightning are very wonderful. It is made a Doubt, whether any thing of Substance, like a Stone, falls from the Clouds, which is called a Thunder-bolt: But this is not incredible; for such Stones have been found after a Thunder-Clap, upon the very Spot where Lightning seemed to fall: There are several sorts of Stones call'd *Belemnites*, from *Βέλεμν* *Q. telum*, according to the ancient Opinion, that such were like Darts cast from the Clouds; there are divers of them in *Gresham College*. *Kentman* mentions one of an Ash Colour, which being rubb'd, smelt like a burnt Cow's Horn. *Moscardo* calls them *Pierre Ceraunie*, Thunder-Stone, from *κεραυνός* *Fulmen*, which signified a Thunder-bolt or Lightning.

Not only *Moscardo*, but others reckon those Stones amongst the *Cerauniæ* or Thunder-bolts. They are so called because believed sometimes with Thunder to shoot down with Violence out of the middle Region. Amongst other Relations hereof, that of *Terzagi* is very express; who saith, That the Corps of one struck dead with Thunder being inspected in the Presence of *Septalius*, and several others, and a black

black Wound observed about the Hip, and searched to the Bone, they found therein a round and edged Stone, which being broken had a very strong sulphureous Stink. With this Author I scarce think any thing of this Nature incredible, to those that read the Relation given by *Wormius*. The Etymology of Sulphur is, *ex Sal vel Sul et πῦρ Ignis*, because Sulphur is an Acid of a salt Nature and fiery; *Id. vel quasi πῦρ Soli*, Fire of the Earth. *Cath. Dr. Plott*, Nat. Hist. p. 303, 304.

However, without these Stones Lightning itself hath a vast Force; it is of a very subtle Nature, and strikes like a Dart in a small Compass, according to the Malignity of it. It hath split and torn Oaks, hath melted a Sword in a Scabbard, and the Scabbard received no Damage; Money in a Chest has been melted, as it were through the Key-hole, without any outward Harm. At a Horse-race upon *Killingworth-Moor* near *Newcastle upon Tyne*, there was a great Thunder with Rain, when three or four Persons took Shelter under a Windmill; one Mr. *Percival* was there killed by the Lightning, and none of the others hurt; and, as far as I remember, the Mill was not damaged. He was a Man of a very good Character, and I myself was acquainted with him.

At *Oxford* there was a Tempest of Thunder and Lightning, *May 10th, 1666*. It was terrible to all adjacent Parts, yet only damaged one House at *Medley*. Two Scholars of *Wadham-College* were struck out of a Boat into the Water;

Water ; the one of them stark dead, the other stuck fast in the Mud, like a Post, with his Feet downward, and for the present so disturbed in his Senses that he knew not how he came out of the Boat, nor could remember either Thunder or Lightning that did effect it. Others in another Boat about twenty Yards distance from the former, felt a shaking in their Boat ; and one of them had his Chair struck from under him without Hurt. A full Relation was published in the Philosophical Transactions, N^o 13. Dr. Plott, Nat. Hist. p. 5.

In the Voyage of Mr. *Laudonniere* Anno Dom. 1564, a great Lightning happened at *Florida*, N. Lat. 30. It burnt up 500 Acres of Land, and killed all the Fowl thereabouts, yet did not then hurt any of Mankind : But after it followed so violent a Heat that the Fish in the River *May* died with it by whole Cart-loads ; and from the Putrification of them proceeded several grievous Diseases. The Savages believed the *French* had done all this Mischief with their great Guns, and that that was the Lightning which killed the Fowl in the Air, and made the Fish die in the Rivers. The same Author relates a Wonder of old Age then in Being ; a Man with six Generations descended from him, himself almost 300 Years old, and his immediate Son near 250. *Harris*, vol. 1. p. 810.

In the Voyage of *John Davis*, at 7 Deg. S. Lat. there was a surprizing Sight of the Sea, sparkling at a wonderful Rate, and appearing

as if it were all on Fire. The Light was so clear and bright at Night that one might have read the smallest Print by it. *Feb. 12. 1605.* Beyond the *Cape* we had a fearful Storm, which raged for two Days and two Nights; at last a Flame of the Bigness of a Candle appeared upon our Main-top-mast-head, after which the Violence of the Weather went off. There are three sorts of Fires that are accounted fortunate, named from three Saints, *St. Helen*, *St. Nicholas* and *St. Clare*. And there is a harmless licking Fire, which as it were *licks* the Hairs and Garments of Men, and is accounted a good Omen. Whence *Vir. 2 Æn.*

*Ecce levis summo de vertice visus Iuli
Fundere lumen Apex, tactuq; innoxia molli
Lambere Flamma Comas, et circum tempora
pasci.*

There is the Image of the Sun, expressed in a Cloud immoveable, indifferently thick, plain and watery. Hence it is that two or three Suns appear; of which one is the true Sun, the other the Images of it, which appear on each side, in the same Manner as the Shadow of the Sun in clear Water. There is an Image of a Whirlpool expressed in a Cloud in a clear Night, whose middle Part is thick and black, and the outer Parts thin and clear; for then there seems to be a Deepness when the Light includes the Darkness; it signifies fair Weather. The Circles about the Sun or Moon signify

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nify Rain, if they continue long; but if they soon vanish, fair Weather.

There is the *great Spout* or *Water-Dragon*, usually attended with a Whirlwind. It is like a long Tube or Cylinder, made of thick Vapours. With one end it toucheth the Clouds, with the other the Sea, which seems to boil all round about it. At first you see a great thick Cloud, from which a part breaks off; and this separated part, being driven by a strong Wind, changeth its Shape, and takes the Figure of a long Pillar, which descends as low as the Surface of the Sea. It is very dangerous to be cut by the Mast of a Ship, because there is a prodigious Quantity of Water in it, and a Wind that blows it. It seems to be above 100 Foot in Circumference.

There is another kind of Spouts called *Syphons*, because they suck up the Sea Water, and make it boil round about. They are of a long Figure like in Shape to some Pumps. They appear about Sun-rising and Sun-setting, towards the Place where the Sun is; they are long and thick Clouds environ'd with clear ones; they do not fall down; but at length being mixed together, and after scattered abroad, they are accompanied with Rain and Whirlwinds, which make the Sea boil and cover it with Froth. There is the *Ox-Eye*, so called because of its round Figure, a Cloud opposite to the Sun, and hath the Colours of the Rainbow.

There are *Trovadoes* and the Fires of *St. Helm*. The former are boisterous Gusts which happen about the *Torrid-zone*, that is, between the *Tropicks*; and they are always accompanied with Thunder and Lightning. During one of these, there appear, on several Parts of a Ship, little Fires of a pyramidal Figure, which the *Portuguese* call the Fire of *St. Telme*; and some look upon them as the Soul of that Saint, whom then they mightily invoke. These are the very same Fires which heretofore the *Pagans* worshipped under the Name of *Castor* and *Pollux*. *Tropick* Birds are a white Mew with a forked Tail, so called because plentifully met withal under the *Tropicks*.

The Sea hath its *Phænomena* as well as the Air; Fires many times appear upon it, especially betwixt the *Tropicks*. There is no other Cause of these Lights but the Nature of the Sea itself, which is full of Salt, Nitre, &c. and being agitated, is presently inflamed, and appears luminous. Not only when the Sea is in Agitation, but in a Calm, Glancings are seen in the Night. The Cause is the Heat of the Sun, which in the Day-time fills the Sea with luminous Spirits, which, uniting together in the Evening, endeavour in the Sun's Absence to get Liberty, and form those little Flashes, as they make their Escape by the Favour of the Night. To this Cause may be attributed those little Flashes over Land which are seen without Thunder.

About the *Equinoctial Line* there is Plenty of Porpoises, which crowd about Ships, and are taken by striking them with small Harping-Irons; they let them have their Play till, through loss of Blood, they suffer themselves to be hail'd on board without any Resistance. Few believe that their Blood is hot, or that they breathe, but both are found by Experience. They have indeed no Gills, but they have two Holes on each side of the Head to let in the Air, which is the Reason that now and then they lift up their Heads above Water, and that they always swim against the Wind. Hence the Seamen, when they see them move in a Calm, say they will have the Wind from that Part towards which they swim.

The Shark hath a large and flat Head, and the Mouth very low, because of the lower Jaw, which lies a great Way under the upper; below the Head the Skin is a kind of Cragrine, that hath a very rough Grain, with six Openings on each side, which are shut by a very thin Skin that is instead of Gills. It is a most voracious Animal; for whatever it seizeth it never quits its hold. The Cause of its Greediness is the Greatness of its Liver, which consists of two Lappets, drawing round at the ends, being a Foot and a half long, four Fingers broad and thin; it hath but one Gut, and that very short; it hath three Rows of Teeth, and another of a triangular Form, very thin, and like a Saw.

There

There is the *Sucking-Fish*, called by the Seamen the *Pilot-Fish*, which are so named because they always follow the Shark; and it is pretended that they lead him to some Prey; but this is a Mistake; for the Shark will endeavour to catch them, and they stick close to his Skin by means of a cartilaginous little Skin of an oval Figure, which is upon their Head, and is armed with many Fibres, where-with it is supposed they attract some Juice, and thence are called *Sucking-Fish*. The *Cramp-Fish* hath the Virtue in it, that when one fisheth for it, it will cause a Numbness in the Hand and Arm. It hath an ugly Shape.

Sombrero-Island, North of *Nicubar*. The Natives cover nothing but their obscene Parts. Their Priests paint their Faces in divers Colours, and have a large Pair of crooked Horns upon their Heads, and a long Tail fastned on behind, which hangs down between their Buttocks. They say that the Devil appears to them in that Dress, when they sacrifice, and therefore that the Priests, who are his Servants, are obliged to conform themselves to the Example and Humour of their Master, let him appear how he will. This Island affords extraordinary Timber for Ship-masts, the Trees being very large, tall and perfectly straight. *Harris, f. Lancaster.*

Horn-Island, one of those near *New-Guinea*, so named by the *Hollanders*, from the Name of their Captain. They were civilly entertain'd by the King and his Courtiers, who had Crowns upon their Heads, made of Parrot's

and Dove's Feathers. The Doves are white upon the Back, and black every where else, except the Breast being mixed. Every one of the Courtiers had one of these sitting by him on a Stick. The People were exceedingly frightened at the Noise of their small Guns, which the King endured with Courage, and desired to hear one of their great Guns. He was set under a Canopy, with his Courtiers about him in great Order; but upon the going off of the great Gun, he leaped out of his Seat, and set up a Run into the Woods, with all his Courtiers after him, and no Persuasion of the *Dutch* could possibly stop them. *Harris.*

Zubut-Island. There is a sort of Water-Fowl as big as a Crow, which they call *Lugan*. They slip into the Mouth of Whales, which swallow them alive, and have their Hearts eaten up by the Bird, by which means many of them are killed, and the Bird found alive in the Carcase. Not far from hence is the Isle of *Mathan*, where the famous *Magellan* was killed by the *Indians*. His Company took a Fish headed like a Swine; but having two Horns, and something like a Saddle on his Back. In the Isle of *Catighan* there are Bats as big as Eagles, and taste like a Hen. There is also a Fowl like a Hen, which hath little Horns on the Head. She lays her Eggs a Cubit Depth in the Sand, where the Sun's Heat hatcheth them.

Two *Dutch* Ships meeting in the *East-Indies*, they differed in their reckoning of Days; so
that

that the one counted *Tuesday* the second of *November*, and the other reckoned *Monday* the first of *November*; and the Reason was, the one sailed Westward and the other Eastward from their own Country; consequently the former following the Sun while they surrounded the Globe, they had one Night or Sun-setting less; as contrarywise, those that sail Eastward gain a Day; the Space of Time being the same on both Sides, but the Computation of Day and Night different, on the Score of the one going against, and the other with the Sun. *Harris.*

In those Seas there is a kind of Hawk, which live entirely upon the Spoil that they get out of the Water. These are equally Persecutors of the Flying-fish with the ravenous Dolphin. That poor Animal can live quietly in no Element; neither the Air nor the Water will afford it a secure Harbour; the Dolphins, and also the Bonitoes, are continually hunting them in the Sea; and when they have no way to avoid a miserable Death, but by using their Wings, and taking a Turn in the Air, then these unmerciful Birds are presently upon them, and inhospitably devour the poor Strangers driven by Persecution out of their own Element. However the Men were diverted with the Sight, of which they were oft Spectators. *Davis.*

Bata, an Island near *Priaman* in *Summatra*. There is a Creature larger than a Hare, which has on each Side two great Flaps of Skin, that are instead of Wings; and they are said to be

the Bat of the Country. South Lat. 20 m. Along the Coast, an *English* Ship had like to have been overwhelmed by one of the Water-Spouts, which poured down near the Ship. It was almost like a River poured out of the Clouds, and put the Ocean into such a violent Ferment as astonished the People. They are sometimes a Quarter of an Hour in falling, and would infallibly sink a Ship should they fall upon it: But, says the Author, we happily escaped this Wash, and proceeded on our Voyage to *Achen*. *J. Lancaster, Harris.*

Ranell, a pretty Town cross the River over-against *Surat*. It hath pleasant Gardens, which charm the Citizens of *Surat*, and invite them to come over and pass away so many Hours as they do at this Place. I know nothing, says the Author, to abate the Pleasure of these lovely Walks, but the infinite Number of great Bats that take up their Lodging in the Trees; there they hang by the Claws in the Boughs in such vast Clusters as would surprize a Man to see. But the Noise and Squeeling they make is so intolerable, that 'twere a good Deed to bring two or three Pieces of Ordnance, and scour the Trees, that the Place might be rid of such a Plague as they are to it. The *Monsoons* for the South serve here in *April* and *September*; and the Winter begins in *June*. *Mr. Finch.*

To the South-East is *New-Holland*, South Lat. 10. Here the Tides on the Coast are very regular, the Flood running North by East,

East, and the Ebb South by West. This Sea abounds with *Manatees* and *Turtle*; the People very black, but different from the *Africans*. There is in the *Philosophical Transactions* an Account of this Country from Mr. *Witsen*. He says the Soil is very barren, and they have no four-footed Beasts, except one of the Size of a Dog, that uses either Land or Water. He speaks of Birds-Nests so large that six Men could not fathom them, but does not describe the Fowls. The largest Bird we hear of is the *Ostrich*; some of them as big as Asses; but they build no Nests because they do not fly, their Wings being very short; yet, with the help of them, they can out-run a Horse. *Atlas, Dr. Grew.*

But there are small Nests of much greater Value than those great ones, and a Wonder in Nature, viz. The *Eatable* Birds-Nests, which have been mentioned before, but deserve further Observation. The Nests are about as big as a Swallow's; they will dissolve in Water, and are a Sauce for all Delicacies; they give a Flavour above all Spices of the *East-Indies* put together. They are only found in four Islands near *Cochin-China*, and are sent to *Tonquin*, &c. Here is a Creature without Reason, that goes beyond human Reason, and hath found out some Materials which Man hath not yet discover'd. Whence should this proceed, but from a superior Mind which directs those irrational Creatures?

It is amazing to observe what Art these Animals have, and how nicely they act, without knowing what they do. It is very wonderful what different ways the several Kinds take in managing their Off-spring. Some cast their Eggs carelessly, as Insects and several kinds of

* See Job 29. 14. *The Ostrich leaveth her Eggs in the Earth, and forgetteth that the Foot may crush them, &c.* Fish, which yet are taken care of. * Salmon leave their Eggs under Stones, so that they cannot be scatter'd about, and the Water gets in to enliven them. Some Serpents chuse fit Places to leave their Eggs in; and others keep their Young with great Care; and, upon Apprehension of Danger, take them again into their Bodies. Some are extreme tender over their Young, till they can shift for themselves, and then own them no more. The Ravens leave their Young before they can shift for themselves, and, whilst they gape for Food, Worms creep into their Mouths, which are bred of the Dung left in the Nest; whence the *Psalmist*, *He feedeth the young Ravens that call upon him.* Psal. 147. 9.

There is another sort of *Eatable* Birds-Nests, but of less Value than the former; of which sort there is one among the Rarities of the Royal Society, the Nest of a little Bird of *China*. The Figure of it is pretty odd, almost like a Half-Moon, about two Inches and a half broad, of a white Substance; when it is moistened it becomes soft and transparent like Gelly, whereunto it seems convertible by boiling. It is esteemed a delicate sort of Meat by the Gentry of *China*; although, like that of
Hart's-

Hart's-horn, it hath no Taste. Outwardly, it is more close and solid; within, consisting of Parts loosely netted together, as those in the Middle of Hart's-horns, or some spongy Bones. *Wormius* hath a Description of it. Dr. *Grew* says, It is supposed that the Birds make this Nest of the *Sperm* of Fishes, and build their Nests on the Sides of high Rocks, from whence the Natives fetch them, and sell them to the *Chinese* at a great Rate. *Hist. Roy. Soc.*

Abasse, in the Way to *Agra*, there is a strange Tree which they call the *Tree of Life*, and honour it with some Ceremonies. It may well enough, says the Author, be call'd the *Tree of Life*, since it is of so stubborn a Nature, that it will live in spite of all Endeavours to destroy it. It is a sort of wild Fig-Tree, which, having rooted it self, continues to grow there, whatever Courses are taken to the contrary. Take away the Earth from about it, stock it up, and manage any Way, still some Root wou'd send up a fresh Tree. Several of the *Potane* Kings and *Moguls* have try'd it, and gave it over as impossible Work. The present *Mogul* has taken a Turn at it, but finding he is able to do no good, he cherishes and makes much of it. *Mr. Finch.*

In some inland Parts of *India* they have no Salt, because there is no salt Water, nor Rock Salt nor Mines, but Providence has appointed other Means. There is *Adam's Fig-Tree*; which, I suppose, is a Name given to that sort, which hath very large Leaves; the Leaves being

ing dried and burnt, the Ashes thereof make a Salt so tart that it is impossible to eat it, till the Saltness is partly taken off; which they do by putting the Ashes into Water, and stirring them ten or twelve Days; and then they strain it through a Cloth and boil it; and when the Water is boil'd away, they find at the Bottom a very good Salt and very white. Of the Ashes of these Fig Leaves they also make Ley to wash their Silks, which makes them as white as Snow. *Tavernier.*

In *Siam* there is a Tree which they call *Copai*, and the *Portuguese*, *Arvere de Raiz*, the Wood of which hath this Property that, being laid in any Person's Bed, it drives away Gnats by the Smell. From the Branches of this Tree proceed several Fibres, which, touching the Ground take Root, like the *Baniam* Tree, and become so many new Trunks, by which Means it spreads over much Ground, and forms a kind of Labyrinth. There is a Tree that yields *Capoc*, a kind of Cotton, but so short, that it serves as Down for Beds; another very common in the Woods, sends forth that Gum which composes the Body of that excellent Varnish which we see on several Works of *Japan* and *China*. There are other Trees, from which they extract several Oils, which they mix in Cements, which make a Plaister like Marble; and a Basin made of these Cements is better than glaz'd Earth. *Mr. de la Loubere.*

But

But of all the Plants of the East the *Ginseng* is the most esteem'd ; the best grows in *China* ; it is of a yellow Colour, and the Pulp of it is smooth, having little Threads like Hair : It is a Root growing in shady Valleys, and some of them in the Shape of a Man. The *Chinese* Physicians affirm that it is a sovereign Remedy for cleansing the Blood, and renewing Strength after Sickness, that he, who chews this Root, will hold out at Labour as long again as he that hath it not ; if it is cut into small Bits, and boiled in Water, being drank in a Morning fasting, it worketh great Effects to the same purpose. Corpulent People may take more than others, but none above the Weight of a Shilling. *Idem*.

There is a Root among the Rarities of *Gresham* College, which they call *Ninxin*, which, says Dr. *Grew*, is corruptly called *Genseng* ; I suppose the same that is above-mentioned, sent over by a *Chinese* Physician ; it is almost of the Colour of a *Parsnip*, divided into two Legs, as often the *Mandrake* and some other Roots are, the Taste a little bitter ; it grows naturally or wild in the Kingdom of *Corea* only ; it is used either alone, or in Composition as the Basis, for Epilepsies, Fevers, and other acute Distempers. In *China* it is accounted so great a Cordial that one Pound of it is sold for three Pounds Weight of Silver ; which shews that it is no Native there, but brought from *Corea*, and tho' it may be planted in *China*, it is better where

where it grows wild. *Philos. Transactions*, Dr. Grew.

Borneo : There is the best *Campfire* ; it is the Gum of a Tree as big as the Hazle, formerly thought a Mineral, and by *Kentman* called *Bitumen Odoratum* ; it is made into Cakes and Balls ; it is the Gum of the Tree *Capar* : Here is *Lignum Aloes*, formed of large round Sticks of a clouded Grain, mixed with Veins of Ash Colour ; it is pleasant to the Eye, bitter to the Taste, but aromattick to the Smell, and takes Fire very quickly ; upon which Account it is that the *Indians* use no other Wood, when they burn the Corpse of their deceased Parents ; which with them is the noblest Way of Burial : Here *Musk* is bred in the Navel of the Cat. The strongest sort is to many offensive ; sweet Spices take away the Smell of it ; the choicest is of an Amber Colour, and covered with a Skin. *Herbert*, Dr. Grew.

Polisdou, one of the *Maldives* : Between this and the Isle *Malè*, from which they derive their Name, there is a narrow Channel, in which the Sea appears as black as Ink, but the Water taken up in a Vessel, looks like other Water : That Sea boils like Water on a Fire, and swells into black Surges, but is not moved from one side to another, which makes it very terrible ; the Reason is not given, but probably there is a *Vulcano* underneath, which is fermented by the Sea Water, and boils it as it were in a Pot, with a Mixture of black Earth. These Islands
extend

extend like a Chain from 8 Deg. N. Lat. to 2 Deg. S. Lat. above 600 Miles in length and 90 in breadth.

Some of these Islands are not inhabited, but cover'd with great *Crabs*, *Cray-Fish*, and a kind of *Penguins* no bigger than a Pigeon, which are so numerous that one can hardly set a Foot without treading upon their Eggs, or young ones, or upon the old Birds themselves; which, being not used to any Molestation, scarce fly at the Approach of a Man. Some of these Islands are only Sand, and overflowed by the Tide; some of them have fresh Water, where they are overflow'd with Salt Water; they only dig for it three or four Feet deep; and, what is very strange, this Water is very hot in the Night, and extreme cold in the Day, especially about Noon. *Mr. de-la-Val.*

The Natives, after eating and washing, serve up a Plate of *Betel* instead of Sweetmeats; for the Fruit is serv'd up along with the Meat; but *Betel* is of excellent Use to help Digestion, and to remove Crudities, for which purpose it is used all over *India*, in many Parts whereof it grows, and the useful Part is the Leaves. The People chew the Leaves, like our great Chewers of Tobacco, and for the same purpose also, viz. to prevent or cure Scurvy in the Gums, which it doth more effectually; those that use it never have the Tooth-Ach; it is planted near to Poles, as we plant Hops, and it climbs up like Ivy: They say they cannot live without it; the Leaf is a little larger than *Orange* Leaves.

Damme

Damme is to be reckoned one of the *Banda* Isles, which are remarkable for *Nutmegs*, as has been before observ'd : But this affords something peculiar ; here are the largest *Nutmegs*, and these have a strange Property, that as they grow naturally, so they will not endure to be planted ; they seem to depend upon Providence, and to disdain the Hand of Man ; for, when the *Nutmegs* are ripe, several Birds come from the Islands towards the South, and devour them whole, but are forced to throw them up again before they are digested ; the *Nutmeg*, then being besmear'd with a viscous Matter, and falling to the Ground, takes Root and produces a Tree, which would never thrive if planted. *Tavernier*.

In the Island *Nera*, one of the *Banda* Isles, there are Serpents of such prodigious Bigness, that one was found with five Hens, one Duck, and a sucking Pig in the Belly : Here is the *Nutmeg-Tree*, which resembles our *Peach-Tree* ; the Fruit is enclosed in a Husk, which being opened, there is a thin Leaf upon a hard Shell ; and to come at the Fruit you must break the Shell, whilst the Nut is green. The Leaf is of a *Carnation* Colour, which, after it is parted from the Shell, turns to an *Orange* Colour ; it makes a most excellent Preserve, if done with Salt and Sugar. The Leaf is the *Mace*, of which is made a good *Stomatick*, being powder'd and mix'd with the *Oil of Roses*. In *Java* there is a Fruit called *Jacca*. It is observable that this Fruit often changes its Taste,

Taste, sometimes like a Melon, sometimes like a Peach, and at other times like a sweet Limon. It hath also a rough Rind or Husk, within which are certain Nuts, the Kernels whereof being roasted are a present Remedy against Looseness. The Nut is as big as a Date, but is not to be used raw, because it occasions vomiting and griping of the Guts; but roasted it is pleasant and good. There is an Herb called *Talasse*, which beareth neither Flower nor Fruit, but is used green in Sauces, and hath an excellent Virtue to fortify the Stomach. There is Abundance of wild Cinnamon. *Mandelslo.*

There is a Tree called *Batan*, of the Size of our Apple-trees; the Fruit is called *Duriaons*, and resembles Melons; it hath the most luscious Taste in the World; it has a Stone as big and rough as that of a Peach. One thing is very observable, that if you have surfeited yourself with excessive eating of this Fruit, two or three *Bettele* Leaves applied to your Breast, or one of the same Leaves eaten, will give you Ease, and digest them without any farther Danger. And if you lay a few *Bettele* Leaves near a whole Room full of *Duriaons*, they will all rot immediately. The *Batan-tree* is only to be met with in *Java* and *Malacca*. *Mandelslo, Linschotten.*

There is a Tree called *Laudan*, which furnishes them with a kind of Meal for Bread, as the Leaves serve for covering Houses; and the bigger Veins for Rafter, as the lesser for
T
Cordage.

Cordage. While these Leaves are young, they are covered with a kind of Woolly Substance, which affords Materials for Stuffs; the Trunk is a Fathom in Compass, but is easily cut down, being composed only of Bark and Pith; the Pith may be eaten presently, after you have taken out the Strings of the Wood; the Pith is beat to Powder being dried, and then affords the Meal called *Sagu*, which is baked with incredible Dispatch. The Tree also yields a Liquor which tastes like Wine, and is called *Thuack*. *Mandelslo*.

Ceylon is the most fruitful Island of the *Indies*; it was the *Taprobana* of the Ancients. There is the *Kettule-tree*, one of which yields several Gallons of sweet, wholesome, pleasant Liquor in a Day; which is boiled either into brown Sugar, or another as good as our second sort. They make Ropes of its Leaves; and the Wood is so hard that it serves for Pestles to beat Rice. Here is Rice of five different kinds, distinguished by their Seasons of ripening. There are large Crocodiles, with a Bone in their Heads, which the Natives powder, and use successfully against the Gravel and Stone.

Here Cinnamon is as plentiful in the Woods as Hazels are in *England*; and the Tree grows naturally; the Cinnamon is the Bark or Rind; when it is on the Tree it is whitish, and being pulled off, they dry it in the Sun. The People never spare the Trees; but cut them down for common Use as other Trees, and they grow again from the same Root. The Wood is soft
and

and white like Fir, and has no Scent. The Leaf is much like that of Laurel, but it hath three Ribs running through it. It hath a Fruit like an Acorn, which is ripe in *September*; it hath no Smell, like the Bark, but being boiled makes an Ointment hard like Tallow, and hath another good Scent. They use it to cure Aches and Pains, and burn it in their Lamps. There are other Trees which bear Berries, of which they make Oil. *Ribeyro.*

In *Ceylon* are found Rubies and other precious Stones. There is a River which swells high with Rain; and when it becomes low again, the People find among the Sand Rubies, Sapphires and Topazes; and they are generally fairer and clearer than those of *Pegu*. There is a Fishery for Pearls in the Sea, that washes the Walls of *Manar* a Town in *Ceylon*; which, for their Roundness and Brightness, are the fairest that are found, but rarely weigh above three or four Carats *. Here are Elephants peculiar to this Country, tho' the smallest, yet the most couragious; and they take the Males by a tame Female, which calls them to her by a peculiar Cry. *Tavernier.*

* A Carat is four Grains Troy W.

The Natives are *Pagans*; but they have an Opinion concerning a Mountain here called *Pico d'Adam*, that there the first Man was created, and that the Spring, upon the Top of it, arose from the Tears which *Eve* shed for *Abel*; and that this Isle was the terrestrial Paradise †. This Tincture of *Christianity* seems to give some Hopes that, among a People docile in

† *Ma dello.*

themselves, the *Christian* Religion might be established.—But there is the same Fault as in others, Men adhere to their Customs and the Prejudices of Education, so that they will not consider Things. There is less Reason for our *Seſtaries*, ſeeing we have had the moſt learned, and, next to the Apoſtles, the moſt pious Divines, who compoſed the Common Prayer, and have *done all things in the Church decently and in good Order.* 1 Cor. 14. 40.

There are Ants of a peculiar ſort, of which *Ribeyro* gives a curious Account; and it is very remarkable, how they build ſtrong Vaults and Arches of Clay, where they live and breed, tho' there are no Ant-Bears to devour them, as in *Braſil*; but the Poultry live much upon them, and chuſe them before any other Food. Their Cells defend them; but, when they come to Maturity, they fly up into the Air as high as they can, and then fall down dead a Prey to the Fowls. Here are whole Woods of Oranges and Citrons, which together with the Cinamon, ſend a fragrant Smell far off at Sea. Their Ivory is the beſt in the World; but what is uncommon, only the firſt Male brought forth hath the large Teeth. *Bochart* proves, by ſeveral Reaſons, that this is the *Ophir* of *Solomon.* *Mandello, Olearius.*

In the Year 1664 there was a Rebellion here, which was foreſhewn by a *Comet.* It appeared ſo very exactly, both as to the Riſe, Progreſs and Event of the War, that we may not, ſaith the Author, omit ſo great and appa-

rent

rent a Wonder. It appeared at first, before the Rebellion broke out, with a fearful Blaze, the Tail standing away towards the West, exactly pointing out the side of the Country from whence the Rebellion sprung. Just when the Rebellion broke out, the Star was right over their Heads, as it were pointing out the Rebels; and when they were in actual Rebellion, the Tail was turned the contrary Way, and by Degrees vanished in a little time, shewing its short Continuance.

In the Year 1666 another *Comet* appeared. The former was so remarkable, observed by so many, yea, and by the King himself, that when this latter appeared, both King and People were much daunted at the Sight of it, as fearing another Rebellion. The Stream stretched towards the West; but the Head being under the *Horizon*, the King sent Men into the highest Mountains, to look if they could see its Head, but they could not. This was visible about one Month, and then vanished quite away. This was again very remarkable, that the principal Part or Head being not seen in this Country, no Troubles ensued, as probably there were in the Place where the *Blazing-Star* made a full Appearance. *Ribeyro.*

A *Comet* is a wonderful *Phænomenon*, and hath indeed natural Causes; yet these may be directed by the Divine Hand, so as to foreshew some extraordinary Event, for a Warning to Mankind. But some learned Men tell us that they have a natural Course, and that the

same appear again at a certain time, which they can foretel as an Eclipse; but this does not agree with their being *Signs*, as formerly learned Men have thought, and Experience seems to have proved. We have Men unfriendly to Religion, who set up natural Causes against a Divine Providence; and I doubt not but their Rules will prove Errors, for which they have wisely assigned so long a time that no body can reprove them.

We have seen in these Parts, in our time, a terrible *Blazing-Star*, which appeared 1680 at Lat. 54 Deg. 48 m. and we know what followed thereupon, great Revolutions in State, and raging Flames of War. God and Nature do nothing in vain; therefore *Comets* must be of some Use; and tho', like the Rainbow or *Halo*, they proceed from natural Causes, yet they may be for *Signs*, tho' not the Cause of any thing. The rowling of Porpoises at Sea do not make a Storm; but it makes the Seamen expect one and prepare for it. A *Sign* in the Heavens doth not compel voluntary Agents, nor can the Influence of the Stars; but the former, being extraordinary, calls upon Men to look about them. *They that dwell in the utmost Parts of the Earth are afraid at thy Tokens.* Psal. 65. 8.

Coromandel extends from the Channel of *Ceylon* to *Golconda*, which borders upon *Bengal*. Here the Women are burnt with their dead Husbands, or buried alive in Sand-pits. This ill Custom was founded upon some Reason, tho'

tho' not sufficient to justify it. For some Ages ago the Women used to poison their Husbands; and so far the Practice prevailed that the Country was once almost depopulated: Upon which Occasion a Law was made that the Wife should be burned with her dead Husband. In some Parts they were not compell'd, but it became a Reproach to them if they did not offer themselves. Hence the Wife was exceeding careful to preserve her Husband, and thought it an Honour and Happiness to die with him. *Tavernier.*

In these Coasts is found much Ambergrease, which is sent from *Pegu* and *Bengal* to *Amadabad*, where there is a vast Trade for that Commodity, and for Silks. Ambergrease has been thought to be the Seed of Whales congealed; but without the least Probability. Some say it is the Product of Mines, like the *Naphtha*, which is a sort of *Bitumen* that easily takes Fire; but with as little Truth, it being certain that this is no where found but near the Sea-side. It grows like our Mushrooms, at the Bottom of the Sea, whence it is torn off and cast ashore. *Peter de la Brook* assures us that in his time there was found at *Cape-Verde* a Piece of Ambergrease, which weighed eighty Pounds; of which he bought a Piece. *Mandelslo.*

This Author gives a further Account of the Tree called *Singadi*, by the *Portuguese Arbor triste*. It is full of Branches with Knots; from each Knot sprout two Leaves that smell like Sage; these produce each five Flowers,

that blow in the Twinkling of an Eye, as soon as the Sun is set; which no sooner rises in the Morning, but the Flowers and sweet Smell which continued all Night, drop in an Instant. Thus the Tree continues till Sun-set again, when the Leaves open, and produce the Flowers in the same manner as before, and cast them again at the first Appearance of that Planet which invigorates all other Vegetables.

The *Indian Fig* is a noble Fruit. The Tree brings forth Leaves before it is a Foot high; but these wither and fall, and renew several times, till the Plant comes to Maturity. The Fruit is shaped like ours, and the Colour a yellow green. In the Middle of the Leaf comes a Flower, whence sprouts out a Branch loaden with a Bunch of Figs. This being cut, another springs out and bears Fruit in a Month's time, and continues so to do throughout the Year. The Leaves are six Foot long, and one and a half broad; the Figs seven or eight Inches long, and as big as a good Cucumber. They are enclosed in Husks, which are eaten instead of Bread, and very nourishing. *Mandelflo.*

Chalaour, in the Road from *Surat* to *Agra*. This Town stands upon a Mountain, where there is a Lake on the Top, and another at the Bottom; both which could not be supplied only by Rain or Dew. In the Country there are vast Woods, which are Receptacles of prodigious Numbers of *Apes*, some of which are as big as Greyhounds, generally of a brown Colour,

Colour, inclining to a Mixture of green, with white long Beards and Eye-brows. They multiply beyond what can be imagined, because the *Banians*, who are more numerous than the *Mahometans*, believing the Transmigration, will not suffer them to be hurt. When Food fails in the Woods they come freely into Towns for Meat, and retire again orderly to the Woods. *Mandelslo.*

In the way to *Amadabad*, we were troubled, says he, with a Company of Apes, of whom I shot two with my Pistol, which so incensed the rest that about twenty of the largest Size pursued us for half a League, and by their odd Looks gave us to understand that they were ready to do us a Mischief, if they durst approach us. He saith of the Monkies, that they get upon the Tops of Houses and frolick there comically. If they would be contented with these Tricks, they would make but good Sport; but they pick out Stones to throw about, and rattle down Tiles upon Peoples Heads; so that a Man can hardly tell where to go upon the Account of those Vermin, that are ever ready to pelt him with Stones, Tiles and Brick-bats. *Mandelslo.*

Boutan, the most Northern Province of *Indoston*, in the Road between *China* and *Muscovy*. Here is the most excellent *Rhubarb*: It is a Root which they cut in Pieces, and stringing them by ten or twelve together, hang them up to dry; being dried, the Merchants carry it very carefully; for if it takes wet, it is
utterly

utterly spoiled. The Author says, That the Emperor of the *Abyssins* sent to the *Great Mogul* a natural Tree all of Gold; I suppose he means an Artificial Tree, that is, a curious Imitation of Nature. It was two Foot four Inches high, and six Inches about in the Stock, with ten or twelve Branches, some half a Foot long and an Inch about, and some smaller. In some Branches appeared Bunches like Buds, and the Roots thick and short. *Tavernier.*

Diu, an Island near the Coast of *Indoston*, possessed by the *Portuguese*. Here is the famous Stone called *Cobra*, an Antidote against Poison. It is made of the Ashes of Roots, burnt together with a sort of Earth, and made up into Paste. Near the Coast of *Diu* there appear in the Water a great many little yellow Snakes about a Foot long, which is a Sign you are near those Coasts; for on the other Coasts of *India* the Snakes are large. Just upon the Shore there riseth, especially against a Storm, a kind of Excrement of the Sea, called *Camasse*; it is like frothy Flesh, and if a Man touches it, it sticks to him like Glew, and puts him into a hot stinging Pain. *Tavernier.*

From *Diu*, through the Kingdom of *Malabar*, as far as Cape *Comorin*, the Winter begins in *June* and continues four Months with very tempestuous Weather. This is more to be admired, since in the same Months the Coast of *Coromandel*, which extends along the same *Peninsula* on the other Side, wherein is the *English Fort St. George*, and lies under the
same

same Latitude, is blessed with the most pleasant Season of all the Year, though in some Places not above twenty Leagues distant from the Coast of *Malabar*. When People cross the Mountain *Balagat*, they no sooner come to the Top of the Mountain, but they see on the other Side a most clear and temperate Air; whilst the former Country is cover'd with Waters, by continual Rains and Fogs.

Those that go from *Ormuz* to the Cape of *Rosalgate*, have made the same Observation; for no sooner they are past the Cape, but the fair Weather that has attended them thither, changes on a sudden into dreadful Tempests. The Reason is the same for both. The East-Winds being some Points northerly, when the Sun is farthest North, are then most favourable; and the South-West the contrary, having less of the Sun's Influence. On the East-side of the *Peninsula*, their Winter is in *November*, *December* and *January*; yet not so violent as on the other Side. But farther North there is another Variety from the same Mountains, where they run East and West, like as in the Mountains in *Russia*. The Winter continues long on the North-side, whilst it is Summer on the South.

From *Surat* towards the Middle of the great *Peninsula* is *Balgat*, Lat. N. 20. Here begin the high Mountains, which run from West to East one hundred and twenty Leagues, and form a dreadful Ridge, which occasions these surprizing Alterations; for on the North-side

it

it is Winter from *May* to *September*, when it is Summer on the South-side; so that on the one side there are continual Tempests, whilst on the other Side there is fine Weather. The Winds gather black Clouds on these Mountains, which break out into great and sudden Rains, that overflow the Country, and so fill the Rivers with Sand that they are not navigable for a considerable time after. *Nieuhoff*.

Indus is a most famous River, which gives the Name to the *East-Indies*. It passeth thro' the *Mogul's* Country, called *Indoston* into the *Arabian-Sea* near *Guzurat*. It is worth Observation, that at the Mouth of *Indus* it is full Sea at the New-Moon, N. Lat. 24, 30. but at the Full-Moon at *Callicut*, N. Lat. 11 Deg. at *Socotora* at the first and last Quarters: This is an Island opposite to the Mouth of the *Red-Sea*, Lat. 12, 30. These Places facing the same Sea, which hath a free open Passage to them, it may be a Question how the Moon should be the Cause of those different Tides, and why it hath not an equal Influence?

The famous River *Ganges* is on the West-side of the same Empire, part whereof is on both sides. On the East is the Kingdom of *Bengala*; from which the Stuff is called *Bengals*. It comes of an Herb, whose Stalk is of the thickness of a Man's Thumb, having on the Top a large Button, which is spun out like a Cotton. There is Snake-Wood whose Root, being bruised in Water, is good against burning Fevers, Cholick, Worms, especially against the

the stinging of Snakes; whence it hath its Name. It was first found out by a little Beast called *Quil*, which is of the Size and Nature of a Ferret; and being bit with a Snake heals itself by this Root. *Atlas.*

Indoston is properly called *India*, the Empire of the *Great Mogul*. It is bounded on the North with *Tartary*, and the Kingdom of *Thibet*, on the West by *Persia*, on the East by the River *Cosmin*, which separates it from the rest of the *Indies*; on the South with the Bay of *Bengal* and the Promontory of *Malabar*. It was known among the Ancients by the Name of *Carmania*. The Province of *Multan* lies along the River *Indus* to the East, and the City of the same Name is in N. Lat. 29, 40. Here is made a vast Quantity of excellent Linnen Callicuts and sent into *Persia*. *Tatta* is a pleasant Country, made so by the Windings of *Indus*; and exceeding fruitful. The main Current of it passeth by *Sindee*, a Place noted for many famous Handicrafts. *Roe, Mandelslo.*

Malabar Kingdom lies along the Coast of the great *Peninsula*, from Cape *Comorin* northward to *Camara*. The Cape is divided from *Ceylon* by a narrow Sea. The Natives mix their Arrack with *Amison*, or put the Quantity of a Pea in their Mouths and chew it till they fall asleep; when they say it makes them dream of the *Elysian Fields*. They take it in great Quantities when they go to fight, which makes them fall on without Fear or Wit; and they

they remember nothing what they say or do whilst it lies in their Heads. It extends within ten Leagues of *Goa* to N. Lat. 14. *Harris.*

Callicut is in the Kingdom of *Malabar*, N. Lat. 11. from whence the Stuff so called hath its Name; it is sixteen Leagues from *Cananor*. The *English* have here a Factory, in a large old House, with a Court and Galleries, but no Fortifications. The Natives are gross Idolaters, and worship an Idol which, *Herbert* says, is as ugly as the Devil himself. A Priest clad in Lawn offers him a Cock every Morning, which is sent afterwards to the Emperor, who eats what he pleases, and gives the rest to the Crows. Six Leagues farther is *Telichery*; there is another *English* Factory, and the Trade is in Pepper and *Cardamoms*; which is a kind of Spice somewhat like Frankincense, which cheers the Heart. Here are black Monkeys much valued. *Harris.*

The *Indians* generally have the same Belief, as the *Romans* and other *Gentiles* had, of the Soul, viz. That it is not a Spirit, but that it consisted of Matter, yet so subtle as to be free from Touch; and that after Death it retains the human Figure; and that if any Person dies by a Wound, it is to be seen in those Aerial Bodies. But as some of the *Greeks* followed the Doctrine of *Pythagoras*, so the *Siamese*, *Chinese* and other *Indians*, hold a Transmigration, by which Souls pass into other Bodies, either in a better or worse State, and into brute Animals, as they have deserved in their former State.

But

But the *Romans* and *Greeks* generally thought there were Punishments for the Soul in a distinct Capacity, and that their Happiness consisted in a Freedom from any Trouble; yet they had less Pleasure than in the Body, having no sensual Enjoyments; whence the Soul was called *Umbra*, a Shadow, and the Place of Abode *Domus exilis Plutonia*. How much more excellent are the Holy Scriptures, which have corrected such absurd Opinions, cleared up the Heathenish Darknes, and brought *Life and Immortality to Light*. The Son of God hath abolished Death, that is, taken away the Power of Death, founded upon the infinite Justice of God, which would have extended to all *Eternity*. 2 *Tim.* 1. 10.

Africa, Egypt. *Ham* the Son of *Noah* first peopled *Egypt* after the *Deluge*, and from thence they spread into *Libya*. When Idolatry began to arise in the World, he was worshipped as the chief Deity in these Countries. A Temple was built to him in the midst of the sandy Desarts of *Libya*, upon a Spot of pretty Ground, about two Leagues broad, and a little more in Length; which formed a kind of Island in a Sea of Sand. The same the *Greeks* called *Zeus*, the *Romans* *Jupiter*, and the *Egyptians* *Ammon*. These two Names were afterwards joined, and he was called *Jupiter-Ammon*. For this Reason a City in *Egypt* is in Scripture called *No-Ammon*, that is, the City of *Ham*, which is named by the *Greeks* Διοσπολις or the City of *Jupiter*. *Jer.* 46. 25. *Ezek.* 30. *Nabum* 3. It

It is one of the Wonders in Nature, being in the midst of almost a boundless Solitude; it has a Grove so very shady, that the Sunbeams can scarce pierce it; and this Grove is watered with several Springs of pure Water, which preserve a perpetual Verdure. There is the Temple with the Oracle, and near this another Grove, in the midst of which is a Fountain, called the Fountain of the *Sun*; at Day-break it is luke-warm, at Noon cold, in the Evening it insensibly grows warmer, and at Midnight it is boiling hot; after this, as Day approaches, it decreaseth in Heat, and continues this Vicissitude for ever. *Harris.*

Some suppose that the *Blacks* are *Ham's* Posterity, and that their Complexion was the Effect of the Curse laid upon him, because Strangers preserve their Whiteness in that Country. But this cannot be the Reason, because *Canaan* was first peopled from one of the Sons of *Ham*, whose Name was *Canaan*. It is certain they were not *Blacks*, neither were the *Egyptians*. Some would have it to proceed from the Sun's Heat; but that cannot be the Reason neither; because other People in the same Latitude are not so black, nor have the same Features; nor are white Men changed there, but only a little tanned with the Sun.

It is uncertain when that Race begun, and it is rather to be resolved into Divine Providence, which might order such a Variety of Men first to be produced from one Man and Woman,

Woman, and the Offspring to be continued in the same kind; as People of very different Features have been produced. Sometimes Children have been born very different from their Parents, and have proceeded no further. But it seems to be an Act of Providence when a strange Birth multiplies into a Race of the same kind, and so it may be in the *Blacks*. All Men may have one Original, and yet by a turn of Providence there may be a great *Variety*.

This Variety of Men is made an Argument by the *Deists*, against *Moses's* Account of the Creation. But that Argument is very weak against so good Authority, which hath so many strong Testimonies, and could never be proved false. There has been none of those Criticks who could contradict *Moses*, or shew any other Original of Man, or other Beginning of any People; which would have been found somewhere, if there had been another Beginning of any Part of Mankind. But they are very presumptuous who set up their own Imaginations, or lay hold upon the least Appearance, to raise an Opposition against *Religion*.

The *Blacks* are no more an Argument than other People, who very much differ from one another. In *Greenland* and *Nova-Zembla* there is a Race of little Men, with large Heads, black Hair, little Eyes, flat Noses and broad Faces. And tho' the North Air promotes Fairness, yet these are of an Olive Complexion, and some of them quite black. The *Siberians*,

in the North of *Tartary*, are much like the *Greenlanders*, being of a low Stature, with broad flat Faces, and little Eyes; and the *Chinese* are remarkable for the smallness of their Eyes. We have no Ground to suppose that these several sorts of Men had each a Father at the Beginning, or one Head of the same Features. The *Kalmucks* are worse featured, with five Fingers breadth between their Eyes. *Tavernier*, *Atlas*, 2. 336.

Pliny and others tell us of a very little Race of Men which they called *Pigmies*; such, they say, lived in some Part of *Thrace*, who had Cranes for their Enemies; and mighty Battles were often fought between them. But this has only Poetical Authority. Some later Writers say there is a Breed of little Men in some Mountains of *India*; and late Traders in *Guinea* tell us that there is a Nation of Dwarfs in *Monaco* or *Aurico*, South of *Guinea*, under the Line, 700 Miles from the Sea. The *Hottentots*, farther South, have very odd Features, and their Sense little above Brutes.

In *America* the Men generally have no Beards, tho' some are, in some Features, like the *North-Tartars*, from whom they might come by *Nova-Zembla* and *Greenland*. All these may be Acts of Providence, as well as that Women in all Countries generally have no Beards. A bearded Parent sometimes begets a Son that has no Beard; and the Creator might so order that many other Differences might be produced for a Variety in his Works,
and

and to shew his unlimited Power; as we may well suppose the *Blacks*, and other People of very different Features, have been produced, yet all from the same Original. If *Esaú's Hairiness* had continued to his Posterity, they had been a Race much different from others; and he was very different from his Brother tho' both born at one *Birth*.

We may allow second Causes of Production, yet these directed by the first Cause; and herein Imagination bears a Part. So a *Black* might be produced, the Mother having seen some black Figure, which made a strong Impression upon her; as *Charicle*, Daughter of *Hydaspes* King of *Æthiopia*, was born a *White*, of black Parents, because the Queen, being big with her, often viewed the Picture of a white Woman. She was afraid her Husband would suspect her Honesty, and thought to destroy the Child; but, to her great Satisfaction, there appeared a round Spot of the Colour of Ebony upon the Child's Arm; a Mark hereditary in that Family. *Heliadorus*.

The *Æthiopians* are almost as black as the *Negroes*, but have not the same Features, nor the short curled Hair, flat Nose and thick Lips; and they are much handsomer. The King is called the *Grand Negus*, and not *Prestre John*, as some have imagined; this being a Prince of *Tartary*. The *Æthiopian* or *Abyssine* Emperor keeps his Court in a Camp, with an Army of 60000 Men. It is so well ordered that it looks like a City with regular Streets, and his Palace

of Tents placed in the middle. *Candace* was their Queen, whose Eunuch was baptized by *Philip*, who instructed that People in the Christian Religion. *Atlas.*

Nubia is a large Country, North of *Æthiopia*, and South of *Egypt*, and the Deserts of *Barca*, on both Sides of the *Nile*. They have a kind of Poison, a Grain of which will kill ten Men. They sell it at 100 Ducats an Ounce; and the Duties laid upon the Exportation of it make the best Branch of the King's Revenue. When Strangers buy it, they take an Oath that they shall not make Use of it in that Country. This Country, tho' a Place of little Learning, yet is famous by giving Birth to the *Nubian* Geographer. The City *Nubia* is in Lat. 19, 30.

Egypt. In this Country the River *Nile* is famous, which makes the Land fruitful by its Inundation. It begins to flow there in *June*, overflows the Country in *August*, and decreases about the middle of *September*, having sometimes swell'd to twelve Yards perpendicular. In *October* they cultivate and sow their Ground; in *April* reap their Harvest with half the Trouble of *Northern* Labourers. They remove their Cattle to the Hills, and their Towns look like Islands, using Boats for Communication one with another. *Atlas, Harris.*

There is that terrible Animal, the *Crocodile*, which is said to shed Tears when it devours any Creature. *Bochart* endeavours to prove it to be the *Leviathan*, mentioned in the Book of *Job*, tho' commonly taken for the *Whale*; and

this

this is most probable. The *Whale* agrees more to that Description in its Largeness and Strength. And that must needs be a *Whale* which swallow'd up *Jonah*, tho' that Creature does not frequent the *Mediterranean* Sea. It was the Order of the Almighty, that sent one for his Purpose.

The *Nile* encreases for about 40 Days, and decreases in 40 more; it is both Food and Physick to the Inhabitants; when it riseth to 24 Feet, it is a certain Sign of a fruitful Year, and an healthy Season; but if it is more or less, it is a Sign of Scarcity, and the Air becomes unhealthy. The Cause of this Inundation, and of its certain Time is, that for some Degrees on each side of the *Tropick of Cancer*, that is, in *Æthiopia*, they have their Winter, which consists in constant Rain, in *May, June* and *July*, and that is received by the River *Nile*, in a vast long and partly circular Course, included by high Lands on each side. *Harris*.

* Twelve Jesuits went from Lisbon, April 1, 1555. One of them Father Gonzalo Rodriguez, who wrote a Letter to the Society in Portugal, dated May 17, giving an Account of the State of *Æthiopia*. They preached the Gospel An. 1556. Hist. of their Travels, p. 134.

The Fountain or Fountains of *Nile* proceed from two Springs, Lat. N. 12 Deg. Long. 30. 28, about 20 Paces distant from each other. It was unknown to the Ancient Writers, and became a Proverb, because none of them had travelled so far, nor any of whom they might be informed. * But it has been discover'd by the Spanish Missionaries, who had travelled over that Part of *Æthiopia*, which is now call'd *Abyssinia*, in the 15th Century. In *Egypt* it divides it self first into two Branches, which divided again into eleven, afterwards into se-

ven ; which when dried up as was said, Ovid speaks of them ingeniously,

— *Septem sine Flumine valles.*

Those Channels are now reduced to four, the rest being stopp'd up by Sands, and having turn'd their Course into other Channels, of which Mr. Fuller speaks pleasantly, *The Channels of Nile have decreased in Number ; for as pink'd and slash'd Cloths, the longer they are worn, have fewer Holes in them : So his Streams have fretted one into another, the Ground being soft and tender which lieth between them.* Another learned Author has observ'd that this is the happy Genius of the *Egyptian* Soil, which is stiled in Scripture, by way of Excellence, *Nachal Mitzraim, the River of Egypt.*

Mr. Gregory agrees with the *Spaniards* in the two Heads of *Nile*, which are in the Country of *Serut* near *Goiam* ; but saith there are five Heads, reckoning the Heads of other Rivers, which have no particular Name, and, after a short Course, fall into the *Nile* ; which, before it arrives in *Nubia*, divides into two Streams, the left and least whereof is called *Niger*, and runs into the Western Ocean : As the Inundation goes off, they sow without tilling, only the Grain is cast upon the Mud, and Rice in the Water.

It was observed before, that the *Egyptians* owe their Health as well as their Wealth to this River ; insomuch, that the Plague, which
often

often rages there, upon the first of the Flood, ceaseth; and if 500 die the Day before, not one dieth the Day following. The Water being drank cureth the Pain of the Reins, and that windy Melancholy arising from the shorter Ribs, which so saddeth the Mind of the Diseased, and is called the *Vapours* or *Hypochondriack* Malady.

The Pyramids are a wonderful Work, about half a League from the *Nile*, and three Leagues West from *Cairo*; they are in all Seventeen, but three of them much surpass the rest, the greatest 520 Feet high, and 682 square. The Top seems to be a small Point, yet is a fine Platform, consisting of 12 Stones, 16 $\frac{2}{3}$ Feet square, and is surrounded with a Battlement, whence the strongest Man cannot throw a Stone beyond the Bottom. They were built by *Gheops* about 1570 Years before Christ, 31 before the Law was given by *Moses*, which was in the Year of the World 2453. *Thevenot*, *Sandys*.

Grand Cairo is a little above the Ruins of the ancient famous *Memphis*; it is with the Suburbs reckoned 36 Miles long, 90 Miles from the *Red Sea*: Here first was found the Way of hatching Eggs in an Oven, by a due Temper of Heat; several thousands are hatched together; and some others have learn'd the same Way: There is shewed *Joseph's* Hall, and a Well called by his Name, which is the only Well in *Egypt*; and it is indeed a Wonder. The Pit consists of two Stories, the first having 220

The Wonders of Nature

Steps, and the second some more cut out of Stone. *Thevenot.*

Memphis was anciently the Metropolis of *Egypt*, and there it is probable were transacted all those Passages relating to the *Israelites*; and hereabout were the ten Plagues first inflicted. It was a proud and profane City, and, as it was threatened by divers Prophets, it was punished accordingly, and became a Desolation, as it continues to this Day. The *Egyptians* hated *Israel*, and reported a false Scandal of them; but as *Memphis* exceeded the rest, it suffer'd a heavier Punishment. It is called *Noph* in Holy Scripture, and only once called by that Name, *Hos. 9. 6.*

Alexandria, supposed to have been the Name of the *Hebrews*, once a most famous City, now much diminished: Near the Haven is the Island *Pharos* with its Tower, one of the seven Wonders, on the Ruins of which the *Turks* have built a Castle. In the City are seen the Ruins of *Cleopatra's* magnificent Palace; and the Cells appointed for the *Seventy* that translated the Bible. There was the inestimable Library of *Ptolemy Philad.* consisting of 500000 Volumes, which was burnt in the Wars between *Cæsar* and *Pompey.* Anno Mundi 3903.

The *Pharos* or Light-House was 300 Cubits high, built of Marble cemented with melted Lead. It was erected to direct Sailors, there being no Hills near. It appeared like a Pillar of Smoak by Day, and like a Star at Night to those afar off at Sea, and was seen at a hundred Miles

Miles distance. It was built by *Ptolemy Philad.* in 470th of *Rome*; it is said to have the same Circumference as one of the largest Pyramids, and cost 800 Talents. The *Attick* Talent most in Use is somewhat above 100 Pounds sterling. *Safura*, three Leagues from the Pyramids, a Village, near which are the Pits of the *Mummies*, so much talked of, and which the *Moor*s sell to Travellers. They are embalmed Corpses, which, as they say, keep in those Pits 2 or 3000 Years, where the ancient *Egyptians* laid them. In the Way they passed a Lake by a Barge, which was rowed by one named *Charon*; and they put a Piece of Coin into the Mouths of the *Mummies* to pay for their Passage, whence arose the Fable of *Charon* ferrying over the Ghosts.

Suez, on the Bank of the *Red Sea* near the Point, 78 Miles from *Cairo*, and seven Days Journey from the *Mediterranean*. *Ezion-geber* near *Eloth*, or *Eloth*, is thought to be that famous Port in the *Red Sea*, which *Ptolemy* and *Strabo* call *Elana*, in the Land of *Edom* in *Arabia*, which *David* brought under his Dominion. From hence Ships went to *Ophir* or *Tharss*, which were either the same Place or near one another, supposed to be in the *East Indies*; by some thought to be the Isle of *Ceylon*, the same with *Taprobana*, by others *Sumatra* or *Malacca*, as before-mentioned; some think they went to *Pegu*, or all those Places.

Solomon's Ships being three Years upon this Voyage, it is to be supposed that before the Invention

Invention of the Mariner's Compass, Sailors durst not lose sight of Land, but always coasted along the Shore; so they must go by the Gulph of Ormuz, and round the Peninsula of *Indoston* by *Ceylon* to the Bay of *Bengal* by *Golconda*, where they might get Diamonds; then to *Pegu* for Gold and Rubies, and to *Siam* for Elephants Teeth: For in these Countries all those Things are found which *Solomon's* Fleet brought to *Jerusalem*. *Father Bomford* saith that the *Peguans* pretend to be descended from those *Jews* that were banished by *Solomon*, and condemned to work in their Mines. *Mandelslo*.

Red Sea. There is a Fish called a *Sea-man* about some little Isles not far from *Tor*, which has two Hands like those of a Man, saving that the Fingers are joyn'd together with a Skin like the Foot of a Duck. It is a strong Fish, and those that kill them stick them with a Harping Iron, as a Whale. The Head of it is like that of a wild Goat or *Chamois*, and is used for Bucklers, which are Musket-Proof: *Tor* is a Harbour, and near is a Monastery, where is a Garden, which contains the Place in Scripture called *Edim*; where are the twelve Wells of bitter Water, which *Moses* made sweet, and are still bitter and hot.

Mocha, on the Coast of the *Red Sea* in *Arabia*, Lat. $12^{\frac{2}{3}}$, Long. 45, about twenty Miles within the Entrance: Here Sir *H. Middleton* offering to settle a Trade was made Prisoner, and sent to *Zenan*, to appear before the *Basha*; distant about 180 Miles along the Coast. The

most

most remarkable Observation, saith he, that occur'd in our Way to *Zenan*, was that of the Cold we felt; which was so extream and piercing that, I think, we had been starved to Death, if we had not been well provided with Fur-Gowns. We were in the *Torrid-zone*, in the latter end of *December*, when the Sun is nearer to them than he is to us at the North *Tropic*; and in the Month of *May* the Sun is in their *Zenith*. This is very strange that the Air is so cold in this Country.

Meccha is about 300 Miles North of *Zenan*, famous for the Birth of the Grand Impostor *Mahomet*. The City consists of about 6000 Houses; the most considerable thing is the Mosque, standing upon that Spot of Ground where, they say, *Mahomet* was born. The Roof is very high, in form of a Dome, joined with two high Towers; it hath above 100 Gates, with a Window above each; the Entrance is by a Door of Silver, three Yards high and two wide, and opens with two Leaves; the Tapestry and Gildings wonderfully rich, together with many other Ornaments. *Medina*, farther North, is the Burial-place of *Mahomet*. Lat. 26, 50.

From the *Red-Sea* let us make a Step again into the *Indies*, and observe some other Curiosities. By the *Arabian-Sea* we come to *Goa*. At the end of the Town there is a Place where Oxen, Sheep, &c. are killed for Provisions. Their Horns are usually left upon a Spot of Ground; and having laid a certain time, they
stick

stick fast in the Earth, and the inner Part takes Root, as if it were a Tree; whereof, says the Author, I have seen many pulled up that had Roots two or three Spans long; which was never seen in any other Part of the World. *Lin-*
schottm.

In the River of *Gow* there is a monstrous Fish of the Bigness of a middle-siz'd Dog, with a Snout like a Hog; the whole Body is cover'd with Scales of a Thumb's breadth, harder than Iron. When he is struck he rolls himself up like a round Ball; he roll'd him so close, saith the Author, that we could not by any means open him, which at last he did and run away; he has four Feet. There are some Rats as big as young Pigs, so that Cats dare not attack them; and there are little reddish Rats which smell sweet like Musk.

Thereabout many of the Fishermen want Legs and Arms, that have been bit off by a sort of great Fish that frequents those Seas, a Shark or such like Creature. A Man let down into the Water to fix a Rudder had his Leg bit off, and putting down his Hand had that Arm bit off, and part of his Thigh. There is a sort of Stone taken out of the Sea from under the Rocks, very smooth and white, and hard to cut; but being wet with Rain or fresh Water, it becomes black, and loseth its Hardness. On the South-East Corner of the *Peninsula* of *Indoston* there is a great Pearl-Fishery, in which 60000 People are employed. *Harrit.*

A Ship sailing from *Mesambique* into *India*, for a whole Fortnight, instead of sailing forward, they found themselves still going back, altho' against the Wind; until at last the Boat swain spied a great broad Tail of a Fish that had winded itself about the Head of the Ship, the Body being under the Keel, and the Head of it under the Rudder, swimming in that manner, and drawing the Ship contrary to the Wind and their right Course; which they with much ado struck off with Staves, and then the Ship went right on. *Linschotten's Voyages* will

Chusan, Lat. 30. in *China*. Here the English have a considerable Factory, in the Neighbourhood of *Venchea*, where Mr. Martin, in his *Atlas*, says, they sow the Fields with Oyster-shells. Mr. Cunningham, R. S. S. Physician to this Factory, enquired into this Story, and says in a Letter to the *Royal Society*, 1701, That he was told they sprinkled the Shells with Urine, after they had taken out the Oysters, and put them again into the Water, where they bred again into Oysters. The *Tallipot-tree* bears Leaves so large that one will cover fifteen or twenty Men from Rain. *Atlas*, *Harris*.

Fokien, 3 $\frac{1}{2}$ Deg. South of *Chusan*. Here is a Mountain shaped like the Idol *Foe*. It is supposed that great Princes, for their Fancy or Grandeur, have cut Mountains into several Forms, some of which have been mentioned before. *Kircher* saith, near the Lake *Chung*, there is a fair House, where always they hear the

the Noise of Bells at the Approach of Rain or Tempests. *La Compte* had this same Account, but dares not affirm it for Truth. There may perhaps be a Sound resembling Bells, by Winds whistling in Caverns; there are several Instances of Winds issuing out of Hills.

Canton, the South Province of *China*. Here are two Harvests in a Year; and there is an Herb which they call an *Herb of 1000 Years*, because it never dies; and, they say, a Decoction of it prolongs Life, and makes white Hairs black. *Kircher* says they have a Creature here called the *Saffron-Fish*, which turns to a Bird of that Colour in Summer, when it flies to the Mountains for Food; returns to the Sea after Autumn, and is changed again into a Fish, which the Natives account a great Dainty. At *Bouro* the Women have such easy Labour, that they immediately wash themselves and the Child, and the Men lie a-bed for them. N. Lat. 23. *Macao* is the Harbour to *Canton*, opposite to the *Philippin Islands*.

In the *Molucca's* there is a Shrub whose Leaves, it is said, turn to Butterflies; but really from the Seed which those Insects lay upon, and hide in those Leaves. Here are Serpents thirty Foot long, which eat a certain Herb, then get upon Trees by the Banks of the Sea or Rivers, and vomit up the Herbs; to which the Fish gather, and are intoxicated; which makes them float on the Water and become the Serpent's Prey. They are reckoned fourteen in Number, all fruitful in Spices, betwixt
10 Deg.

10 Deg. S. Lat. and N. Lat. 3. They have no Corn nor Rice; but they make Bread of a Tree called *Sagu-Palm*, and also drink of its Sap. *Atlas.*

Summatra, S. W. from the *Peninsula* of *Malacca*. The *Atlas* says here are Reeds thirty Fathom high. The *English* have their chief Pepper-Factory at *Jambi*, on a River in the East Part of the Island; and are much esteemed by the King. The River *Indapura* is of a red Colour, ascribed to the Bark of Oaks; the Water is unwholesome, and the Air so pestilential about this River, that it's called the *Devil's Isle*; it kills Men and Beasts almost as soon as they come ashore; the middle Part of it is under the *Equinoctial Line*. *Achen* the chief City. N. Lat. 5.

Batavia, the chief City of the *Dutch* in the *Indies*. It is in the Island of *Java*, consisting of very neat Buildings. When the *Dutch* began to fortify it, the King besieged it. One of his Generals deserted to the *Dutch*, and gave them Advice that the Enemies, being *Mahometans*, were obliged by Principle to purify themselves for six Days, if they happened to be touched with the Excrements of *Christians*. Upon which, when they made the next Attack, being near the Walls, the *Dutch* ply'd them so with Stink-pots, which they were more afraid of than Cannon-ball, that they abandon'd their Ladders, and the *Dutch* pursued them with great Slaughter. *Atlas.*

Narvar

Narvar is in N. Lat. 24. the chief City of *Gebud*, bordering upon *Bengal*. Here are two kinds of Bats, one like those of *Europe*, the other much different; it is eight Inches long, as thick as a Duck; its Hair yellowish; its Head and Eyes like a Cat's; its Snout like a Rat; it has black prickt Ears; two Teats as big as the end of one's little Finger; Wings almost a Foot long, of a black Colour; has no Tail, but four Legs; the fore Legs end in five Fingers, like a Man's Hand, have Claws instead of Nails, with which it hangs upon Branches of Trees; and they are said to be good Meat. This Country produces Store of *Affafetida*, which the *Banians* mix with Sauces, and think there is no Dish good without it. It is a kind of Gum which issues from a small Tree in the latter end of Summer, and is gathered in Autumn. The best Sort is in the Province of *Utrad*. *Mandelslo*, *Tavernier*.

* Here is
the best
Aloes,
which is
made of
the Juice
of a Tree
of the same
Name;
the Spani-
ards call it
*Sempervit-
um*.

Now let us return to *Æthiopia* by *Zocotara*, which is an Island opposite to the Entrance of the *Red-Sea*. Nigh this Island, says the Author, we were one Night surprized with a strange sparkling and glaring of the Water all about us. It was just before very dark, and now there was so much Light as would have served to read by; and it was not a sudden Flash, but continued an Hour's sailing. When the Philosophy of our whole Fleet was puzzled to find out the Cause of it, we found it to be a Swarm of *Cuttle-Fish*, swimming about us, that made this Appearance, and were so kind

as to afford us the Assistance of their Light when the Stars denied us theirs. N. Lat. 14. *Saris.*

Duncala and *Tigra*. There is a large Plain of four Days Journey, one Side whereof is entirely crusted over with pure white Salt, which serves the Inhabitants far and near. There is the Bird *Pepis*, which conducts Hunters to Game; and having discovered a wild Beast, he is said to fly towards the Huntsmen, crying *Fonton Kerr*, and flies softly before them to the Place. There is the *Hyæna*, the most voracious of all Beasts; for by Night and Day they destroy all the Men and Beasts they meet with, and sometimes dig down Houses to come at them. *Ludolphus*. Lat. N. 14.

In the wide Forests there is that noted Creature the true *Land-Unicorn* of the Ancients, called by the Natives *Arwebaris*, which hath one long Horn on his Forehead; a fierce and strong Creature. The *Portuguese* Missionaries had an Account of him, that he is very shy and rarely to be seen. *Ludolphus* saith several have been seen feeding in the Woods, in the Province of *Agoas*. This must be the same that is often mentioned in Holy Scripture, and more particularly agrees to the Words of God spoken to *Job*, *Canst thou bind the Unicorn with his Band in the Furrow? Or will he harrow the Vallies after thee?* *Job* 39. 10. *Ludolphus, Harris.*

In the *Nile* and some Lakes is seen that amphibious Creature called *Hippopotamus*. the

River-Horse, which *Bochart* supposeth to be the *Behemoth* in *Job*, and hath some Resemblance of a Horse, especially in his Head; his hinder Parts are much like to a *Buffler*, but his Legs shorter and thicker. At his full Bigness he is as large as a Camel, hath wide and open Nostrils; in the lower Jaw he hath four great Teeth, half a Foot long, two of which are crooked, as big as the Horns of an Ox; the other two are as big, but straight. He hath thick large Feet, with four Toes on each, like a Crocodile; a little Tail like an Elephant, little or no Hair on his Skin; and he feeds on Land. *Thevenot.*

Of the River *Nile* we may observe farther, that by its Inundation God's Providence does Wonders for *Egypt*. The Soil being naturally sandy and barren, the River plentifully waters the Ground, and brings a rich Mud along with it, and makes it very fruitful; which that it may more certainly effect, the North-East Winds rise about the Beginning of *June*, and, continuing for four Months, keep back the Water, and hinder it from running off too fast into the Sea, and so bring it to pass by their Stop, that the rich Sediment settles upon the Land. *Thevenot.*

The Water is muddy and thick, and not wholesome of itself; but they have a way to cure it. They have large earthen Vessels, which being filled, they rub the Inside with three or four Almonds; and in the Space of of a Quarter of an Hour the Water becomes
very

very clear. Being thus purged it is very wholesome, so that it never does any Man harm, tho' he drinks never so much; because running so long a Course, and through so hot a Country as *Æthiopia* is, the Sun corrects and cleanseth it from all Crudities; and indeed it sweats out almost as soon as one drinks it. Those that bring the Water to the Houses have always a Paste of Almonds to rub the Vessels with.

In *Æthiopia* is the *Torpil Fish*, whose Nature is such, that if a Person toucheth it he is suddenly seized with excessive Coldness and Trembling. There is the *Zecora*, the most beautiful thing in the World, of the Bigness of a Mule, having Circles about his Body of various Colours, some broader, some narrower; one of them was sold for two thousand *Venetian* Pieces, for a Present to the *Mogul*. There is as ugly a Creature called the *Fonke*, though its Face is somewhat like human; it has an ugly Ruff about its Head, like an old-fashion'd thick Dress; it hath a spotted, dark, rough Skin; the Body somewhat like a Cat, but rather of a larger Size. *Ludolphus*.

There are vast high Mountains, in Comparison of which, it is said the *Alpes* and *Apen-nine* are Hillocks; and they are so steep, that there is no way of getting up to the Top without the Help of Ladders and Ropes, by which they crane up their Cattle and other Necessaries, and yet so spacious at the Top, that they contain Woods, Fields, Fountains,

and even Fish-ponds; which Rocks are called by the Natives *Amba*, &c. Such is that high and steep Rock in *Amara*, where the Princes of the Blood are secured and kept as in a Prison, lest any should attempt to make himself King. When the King dies, he, that is to succeed in course, is fetched from hence to the Throne. *Ibid.*

There is the *Cameleopard*, having a Head and Neck like a Camel, and the Body spotted like a Leopard; but he hath so long Legs, that a Man upon an ordinary Horse may pass under his Belly without touching him; probably the same which *Ludolphus* calls the *Panther-Camel*, and says he is so tall, that a Man can reach only to his Knees. There are also of the smallest Creatures, a Sort of Ants called *Gundan*, which, like stout Creatures, always march in military Array, and have others that are their Slaves. Here a kind of Bees swarm, which have no Stings, and they secure their Honey under Ground; such was the Food of *St. John Baptist*, with a large kind of Locust found in the Wilderesses. *Ibid.*

Here is the Herb *Affixoe*, of such rare Virtue against the biting of Asps, that it is a present Cure. The most hurtful Serpents, touched with it, lie for dead; and he that eats the Root of it, may walk in the midst of Adders, and even handle the most venomous Snakes without Danger. *Ibid.* This may be the Reason of what another saith of the *Egyptians*, that they are a very ignorant sort of People; and

and yet they have some Secrets among them very surprizing, which some count magical. They will take up Vipers without Hurt, and bring whole Sacks-full of them into the City to sell to the Apothecaries. There are *Moorish* Women, who stop Childrens crying by pulling Worms out of their Ears. *Thevenot.*

Near *Damietta* in *Egypt*, there is a Lake called the *Dead-Sea*, because it is on all sides surrounded with Land, and has no manner of Outlet. In it are found a great many Petrifications of Wood, and Bones, converted into Stones; which are pretty curious. Going forward on the West-Side, you come to the Mountain of *Eagle-Stones*, where, digging in the Earth, they find a sort of Stones of different Sizes, which have many Virtues, and particularly defend from venomous Creatures; they are called *Eagle-Stones*, upon a very strange Account, that the Eagles, which breed much thereabout, carry them to their Nests, to preserve their Young from Serpents. *Ib.*

There is a strange Lake called *Natron*, which looks like a large Pond frozen over, and the Ice cover'd with a little Snow. It is divided into two Parts, supplied by two Springs about Knee-deep of Water; which, as soon as it comes out of the Earth, makes as it were great Pieces of Ice six or seven Fingers thick. There is red Salt on the Top, then a black *Natron*, which the *Egyptians* use for Lee; and last of all is the true *Natron*, which is much like the first Salt, but more solid. A great
X 3 many

many Camels come every Year to be loaded with this Natron; and from this Lake there is a sort of Salt made up in Form of a Pyramid, which they call *Pyramidal Salt*. *Thevenot, Harris.*

There are several sorts of Fig-trees, and, among the rest, one called *Adam's Fig-tree*, whose Fruit is very large and long; but the Leaves are about a Fathom long, and two Spans broad. There's another Sort, whose Leaves are round and very thick; the Figs hang like Bunches of Grapes, and are as sweet as Sugar. In *Egypt* the Snipes appear in *January* till *March*; in *May* yellow Birds or *Nitrals*, which are nothing but a Lump of Fat; and wild Turtles very good. In *September* the yellow Birds and Turtles come again, and at the same time Larks, which last till the Year's End. *Ibid.*

In the Woods of *Æthiopia* there is the Civet-Cat, which is as big as a Cur-Dog; the Civet lies in a kind of Cod of Flesh, which, being opened, is shaped like a split Gizzard. Being taken young, they are kept by the Merchants in Grates or Cages, where they feed them with Milk, Bran and Flesh, and twice a Day make them run up and down the Cages till they sweat; upon which they gather the odoriferous Sweat from their Groins, Shoulders, Necks and Tails, and reserve it under the Name of Civet. There is *Dabub*, which has Legs and Feet like a Man's; but in Bulk and Shape resembles a Woolf. The Huntsmen, finding his
Den,

Den, beat Drums and sing before it, by which Means he is so transported, that he lies still and is easily taken. *Leo.*

Libya. There is a Creature called *Dante*, somewhat like an Ox, but has shorter Legs and a longer Neck; his Ears are like a Goat's, and he has one black Horn in the Middle of his Head, which turns round like a Ring. His Flesh eats like Beef, only it is sweeter; the *Moors* fill their Powdering-tubs with it. There is the *Guahex*, a kind of wild Cow, somewhat less than a small Ox. It is of a Chesnut Colour, having black Horns very sharp. You may see 100 or 200 together, running up and down like Harts. They are good Meat, and their Hides make good Leather. *Marmol.*

In the Inland-parts are Lions, which never come abroad in the Day-time; but hunt their Prey in the Night. This fierce Creature will not attack a Man, if he keeps his Pace without altering his Countenance; but if he shews any Sign of Fear, the Lion presently flies at him and pulls him in Pieces. He is afraid of Fire, and, as People often travel in the Night, or lay them down to Rest, they provide Fire to scare the Lions. But they seldom approach without being perceived, because they are followed by little Animals like Foxes, which eat up his Orts, and howl like Dogs and so give the Alarm. The Lion hates these Creatures, and tears them in Pieces, when he can catch them; but he loves the Jackal, who attends him as a Servant, and helps him to find his Prey.

Barbary borders upon *Libya* Westward along the Coast. The Deserts of *Sara* are unsupportable for Heat, and no Water is found in five or six Days Journey. In the Desert of *Araoad* are to be seen the Tombs of a rich Merchant and a Carrier, of whom the Merchant bought a Cup of Water for 10,000 Ducats, and died soon after he drank it, as did also the Person that sold it. The Desert of *Barca* joins Northward on the Desert of *Goaga*, and that Part of it on the *East* was the inner *Libya* of the Ancients, and famous for the Temple and Oracle of *Jupiter Ammon* before-mentioned.

In the *Libyan* Desert there is a Place called *Bardena*, containing three Castles and five or six Villages, which were thus discover'd: A Caravan of Merchants having lost their Way, were conducted by a blind Man, who knew the several Countries by the Smell of the Sand; and when he came within 40 Miles of this Region, predicted by the Smell that they were not far from an inhabited Place; accordingly within three Days they fell in with the three Castles. The Inhabitants were so astonished at the sight of them, that they shut their Gates; but the Travellers forced them open, and got a sufficient Quantity of Water to relieve their present Necessity. *Harris.*

Nigritia, the Country of the *Blacks* by the River *Niger*, which runs 2800 Miles; it is a Branch of *Nile*, and increaseth like it, and fructifies the Lands; it falls into the *Atlantick* Ocean

Ocean by several Mouths; the Principal near Cape Verde, Lat. 15. N. Long. 1. West. It hath five Batteries well mounted with Guns. There is a Town with a high Tower in it, and another without, mounted with Guns to defend the beautiful Inhabitants from their Enemies.

Atlas.

The *Niger*, at one Mouth, is called *Senega*, from which 150 Leagues, there is so great a Water-fall, that one may pass underneath without being wet. *Senega* Water is white, but at a Place called *Busitembo* (that is white and red) it is joined by a River called *Labamar*, the Water whereof is red; and the *Negroes* say, that these two Waters are of such contrary Qualities, that when they are mixed they prove Emetick, i. e. causing a Vomit, ἐμελικὸς ἀπὸ ἐμῶν vomo; tho' separately they have no such Effect.

Gambia River, another Branch of *Niger*, which flows near 200 Leagues from the Mouth to *Baraconda*; above which are many *River-Horses*, *Crocodiles* or *Allegators*; one of which was 33 Feet long, as was known by its Impression on the Sand; they have a Musky Scent, which spoils both the Taste of the Water and the Fish. The *River-Horse* here, in the Shape of his Body and Head, is exactly like a Horse; but he has four short Legs, his Foot divided into five Parts, sometimes twenty Inches over; he snorts and neighs in the Water by Day, but at Night feeds in the Marshes. Here are large Elephants, which at certain times cast their
Teeth,

Teeth, and some are found weighing two hundred Pounds.

There is a Fish in shape like an *English Breme*, and of a Nature like the *Torpil* Fish before-mentioned. An *English* Sailor having touched one of them, he presently lost the Use of his Hands and Arms; and another lost the Use of his Legs, but their Sense came to them again: He benumbs all the Fish he touches, and then makes them his Prey; but being dead he is very good Meat. At *Tunis* there is a Bridge called the *Cantre*, built over the River *Magerda*, and with such Art as to make a pleasant Cascade at every Arch. *Thevenot.*

The People about *Niger* fish in Ponds and Lakes, each with a Basket having a narrow Mouth, which they hold downward in the Water, and by going into the Water they stir the Fish, and catch them in their Baskets. There is store of Fowl, Geese, Duck-Mallard, Herons, Storks, &c. which dare not come into the Water for fear of the *Crocodile*, but sit on the Banks of it and feed in the Marshes. There is the *Gourd* which grows like *Pompions*, from the Bigness of an Egg to that of a Bushel; of which they make several sorts of Vessels, to eat, drink, and wash Cloths in.

There is a Fruit called *Cola*, like our larger sort of *Chestnut*, flat on both sides, yet without a hard Shell; the Taste of it is very bitter, yet, what is strange, it causes that which is taken after it to taste very sweet; it makes
Water

Water taste like White Wine and Sugar. There is an uncommon Bird which hath no Legs, but two Strings by which he hangs with his Head downward, resembling a dead Leaf hanging on a Tree, and is of the same Colour, and by that Means escapes Birds of Prey. *Harris.*

Cape de Verde. On this Coast the *Sword* Fish is often seen. The Author, *James Lange*, saw one of them engaged with a Whale; he at last got under him, and ript up his Belly with his Teeth, which are on both sides of the *Sword* like a Saw; the *Sword* issues from his Snout above a Yard in length. The Whale being kill'd swam upon the Surface of the Water; and the Negroes catch'd the *Sword-Fish* also, and presented the Author with the *Sword*, which he brought to *Amsterdam*. The Whale, to avoid him and the *Theshal*, leaps sometimes more than his own length above Water; there is the Head of one, not of the largest sort, in *Gresham College*, the *Sword* a Yard long. *Dr. Grew.*

This same *James Lange* tells a strange Story: Being at *Benin* in *Guinea*, one *Direck-Serpent* invited him to his House; I found him, says he, lying upon a Matt, lame on one Side from Head to Foot. I ask'd him the Occasion of his Illness, of which he gave this Account: I plow'd a Piece of Ground belonging to the Idol *Titjesje*, and it produced a good Crop; but Harvest approaching, one Day a great fiery Serpent came into the Field, set all the Corn on Fire, and thence came to my House,

House, got upon the Top of it, which was cover'd with Straw, set it on Fire also in the sight of several Neighbours. As he was going to save himself he was struck with the Palfie, which continues to this Day; they gave him the Name of *Serpent* from this Accident. *Lange* observ'd the House to be newly built: They worship the Devil, and are much given to Sorcery.

James Lange was a *Dutchman*, and seems to be a Person of good Credit: He says further, that in their Way home they landed in *England*, and he came to *London* in the Year 1622, where he narrowly escaped Death. Being desirous to go into the *French* Ambassador's Chapel, where they were then at high Mass, I was, says he, kept back by the Guards that were placed there to my singular good Fortune; for, before Mass was ended, a Pillar, which sustained the Roof of the Chapel, giving Way, the whole Fabrick fell and buried ninety Persons in its Ruins. *Harris*.

Some Part of *Africa* abounds with Locusts, as did some Parts of *Asia*, when they came by an East Wind into *Egypt*. *Ludolphus* assures us, that these Animals are very large, and are agreeable Food to the People of those Countries, who dress them after their own Way; they make some Amends that Way for the Damage they do to the Fruits. This well explains that Scripture, which saith of *St. John Baptist* that he fed upon Locusts; and shews the Mistake of some Interpreters, who, judging of these

these Animals by those of the same kind, or so called in *Europe*, cannot reconcile themselves to the common Version ; and imagine that St. *John* fed upon an Herb, which is called by the same Name.

When these Creatures change their Quarters, the Sky is fill'd with them a long Way; and sometimes they darken the Sun it self: They ravage whole Provinces, and the Inhabitants send a great many armed Men, to hinder them, by continual Firing, from lighting upon the Ground. A late *French* Captive saith it is a certain Truth that, when they come first in Season, they are as much esteem'd as green Pease at *Paris*. The Country People live upon them above four Months in the Year. The Revenue of these Locusts at *Tripoly* is as considerable as that arising from Quails in the Isle of *Caprea*, in the Kingdom of *Naples*.

Sierra Leonna, part of *Guinea*, Nor. Lat. 8.
36. The Country is so fertile, that Oranges, Figs and Citrons grow almost without any Culture : There is the *Oyster-Tree*, which has no other Fruit but Oysters ; it has a very broad Leaf, and almost as thick as Leather, having small Knobs like those of the *Cyprus*. The Boughs hang down a good Way into the Water, and are over-flow'd by the Tide ; on the Mud and Slush that sticks to them, the young Oysters bred there fasten, and that in such vast Numbers that one can hardly see any thing almost but long Ropes of Oysters. The Mountains, and inland Places, are full of Lions,

ons, Elephants, Tigers, Monkies, Porcupines, &c.

The Natives tell of a strange Beast, which the Interpreter rendred a *Carbuncle*, very often seen by them, but only in the Night-time. This Creature has a Stone of incredible Lustre in his Forehead, and sees by the Help of that natural Torch to find out and manage his Provender; it is timorous, and has so good Ears that it takes the Alarm at the smallest Noise; it has a kind of Muscle or Film that plays forth and back over that lucid Stone; so that it is managed just like a dark Lanthorn, to open or shut as the Creature pleases, and when it hears any Noise, immediately the Flap is clapp'd over the Stone, and the Light is lost, and he saves himself by blundering his Pursuer, and leaving him in the Dark. This is like the *Phosphorus* or *Bolonian Stone*, which shines, being exposed to the Air; but this is natural, the other made by Art.

Bildulgerid, the ancient *Numidia* was Part of this District. There is a River which springs from Mount *Atlas*, and passing by *Teolacha* hath a Current extremely warm, and is called the *Hot River*. This Town is near *Deusen*, now a small Village, which was built by the *Romans*, and there are some *Roman* Sepulchres. There is a River issuing out of the Mountains of *Numidia*, which, in Winter time, when other Rivers swell, commonly grows dry. *Atlas*.

Zaara, Part of the Ancient *Libya*, North of *Goago*; there are some Remains of the ancient *Cyrene*,

Cyrene, once the famous *Pentapolis*. Nigh to *Cape Bajadore* there are Banks of Sand stretching along Part of the Coast; towards which so strange a Current sets in, that the Water is in a mighty Agitation, the Waves and Sand mixing together. It resembles a boiling Salt-pan, and frequently exceeds it, mounting up to a vast height; perhaps this was the ancient *Syrtes*. *Atlas*.

The inland Part of *Guinea*, bounded on the East by *Nubia*, is watered by the River *Niger*. Nigh to *Sangeug* is a Well ten Fathom deep, whose Water is naturally so very sweet, that in Taste it comes nothing short of ordinary Sugar. In the Province of *Gago* there is a vast sandy Desert, in which many endeavouring to pass over perish; and the Bodies laid there do not in the least corrupt, but become hard like the *Ægyptian* Mummies.

From hence the River *Ria da Volta* runs into the Sea with so strong a Current that, for a Mile, it is of a whitish Colour, and hath a sweetish Taste at almost ten Fathom deep. There is a Tree called *Mignolo*, which having an Incision made in its Body, yields an excellent Liquor, which to the Natives is more pleasant, strong and nourishing, than the best Wines. There is the Water-Lizard, and one sort called *Angueg*, which is shaped like a Dragon, and no bigger than a Cat, but has a Tail that will cut a Man's Thigh in two. *Harris*.

Angola. In some Lakes is frequently seen the Creature called *Pesiengoni* by the Natives,
by

by the *English Syrens*, because, when taken, they fetch many Sighs, and mourn like a Woman, and are something like in Shape; there is a Hand of this Creature at *Leyden*. Here is found that remarkable Creature like a Man, called *Ourang Outang*; from which, it is thought, the Poets derived their Fable of *Satyrs*; they are reckoned the same with the large Apes of *Borneo*. One of them was brought to *London*, and seen by Multitudes of People. 7 Deg. S. Lat.

In the Deserts of *Africa* is the Female Land-Tortoise, one of which is in *Gresham-College*, eight Inches long and five broad; has a Tail three Inches long; the Head, Back and Belly, have all bony Covers, overlaid with Shells. It is cancellated with little Squares on the Margin, on the Top of the Back with sexangular Figures, and with the largest Area's between. The Belly is party-colour'd, black and citrine, cancellated in the middle with Squares, having Triangles before, and * hyperbolick Lines behind. The Feet are covered with small round Scales; and the Tail with square ones. Dr. *Grew*.

* Lines having Angles, as in the Geometrical Figure, Hyperbola, a Curve-Line, the Boundary of a Plane, formed by the Section of a Cone.

Cape *Corse* in *Guinea*, an *English* Plantation, with a strong Fort, N. Lat. 2. From hence our Coin takes its Name, because the Gold was brought from *Guinea* of which *Guineas* were first made. In the Country there are several sorts of Apes; those called *Baries* are the strongest, and most cunning; when taken young and bred up, they are used as Servants, to bring in Water,

Water, to turn the Spit and wait at Table. *Zanguebar*, on the East-side of the Cape, over-against *Angola*, the North-part 2 Deg. S. Lat. there is a Fig-tree which dies and revives again every Year; the Figs are four times as large as ours, and one of the Leaves will cover two Men. *Harris.*

Bay of *Soldania*, a convenient Harbour in the Way to the *Indies*, with a fine Stream of sweet Water, very refreshing in those hot Countries. It is twelve Leagues short of the Cape of *Good-hope*. This famous Cape elevates the South-Pole 34 Deg. Lon. 48. from the *Azores*, where the first *Meridian* is commonly placed, 28 from our *Lizard-Point*. From the Land's-end of *Cornwall* it is 6600 *English* Miles. Here Women are delivered without any Pain; and they give their Children suck over their Shoulders. Here is the beautiful Bird *Rachama*, whose Feathers are crimson and white, as pure as can be imagined.

Islands of *Africa*. *Madagascar*. There are Crocodiles different from others, twenty-five Foot long, having four very short Feet; so that the Body almost drags upon the Ground; therefore Nature has provided, that the under Jaw is fixed, and the upper moves, otherwise they could catch nothing, and must starve. There are Tortoises which have Shells so large that one of them would cover a small Room, which could hold ten Men. There is Plenty of the fine Wood *Ebony*, and the Oil of *Sejanum*. There is a medicinal hot Water
Y which

which readily cures cold Distempers in the Limbs.

St. Augustin's Bay. Here are Abundance of large Spiders, which carry their Webs from one Tree to another, and spin a substantial Silk of a very fine yellow Colour. There is a kind of Insect that hath many Legs, by which it hangs upon a Tree; it is enclosed with a double Cod of white Silk. Here is also the *Chamæleon*; and here it was found, by Experience, that these Animals do not live upon Air, according to the vulgar Opinion. One of them being taken, was presently seen to hunt after Flies. Assoon as he saw the Prey he darted out of his Mouth something like a small String, with such speed that one cannot imagine a Spider more quick; it is its Tongue, as was before observed. S. Lat. 24 Deg.

It is confirmed by *Zandius* that the *Chamæleon* hunts Flies; who saith, he dissected the Tongue of one that was as long as a Hand's breadth, hollow and empty; and what is wonderful, in the Top there is a Hole with a Swivel in it, with which he catches his Prey. *Myndius* saith he defends himself against the hungry Serpent after this Manner: He holds a broad and long Stalk, and turning himself under it like a Buckler, he encounters the Serpent; the Stalk is broader than he can take in his Mouth to bite in sunder; and the *Chamæleon's* Limbs being too hard for him to do him any Harm, the subtle Serpent labours in vain.

Jonston, p. 216.

In

In those Seas are the flying Fish, which have two Fins somewhat like Wings; they fly as long as their Wings are wet, and then, dropping into the Sea, arise and fly again; by which Means they fly their Enemy the Dolphin, yet are often taken by him. Monsieur *Cauche* saith one fell in the Night upon his Comrade's Cheek, who thought the other had given him a Cuff as he slept, and would needs quarrel with him; and had not the Fish been found when a Light was brought, we had fallen together by the Ears.

There is a high Mountain, on whose Top is a Spring of very salt Water, tho' thirty Leagues from the Sea, as my Author observes; but that is nothing. There is no doubt but all Springs come from the Sea, except some small ones, which may proceed from Rain or Snow. This is a Confirmation of it, because it does not receive its Saltness from Rain, neither doth it from the Sea; but the Water, coming from the Sea, receives its Saltness by the Way from a Mineral. The Land returns what it receives; and the Pressure of the Sea, and the incumbent Air, drives up the Water, yet more or less, according to the subterraneous Passages, and less or more Opposition of the Air in its Way.

Canary Islands. Teneriff. There is a prodigious high Mountain called the *Pike* from its sharp Top. It reaches a good Way above the Clouds; and the Air is so pure it is too thin for a Man to breathe in; so that they, who go up to the Top, carry Sponges to gather Air.

Snow lies a little above the mid-way, when it is sultry hot at the Bottom. It sometimes flames at the Top from Veins of Brimstone. *Varenius* saith it is three Miles and a half perpendicular; and it is seen 120 Miles at Sea. 27 Deg. N. Lat.

Madera. This Island produces strong Wine, and hath the same Property as *Ireland*, that no venomous Creature is bred, nor can live here if brought from Abroad. On the side of a Hill nigh *Fourat*, there is a Fountain whose Waters sometimes issue forth in such Abundance, that the adjacent Parts are subject to a terrible Inundation. There is another Island of the same Name, which produces excellent Wine, fine Sugars and sweet Woods. These Islands are opposite to *Fez*. Lat. 33.

Fierro, one of the *Canaries*, Lat. 27. There is the wonderful *Water-tree*, whose Leaves continually distil pure Water; it is a single Tree, as big as a middle-siz'd Oak. In the Night a thick Cloud or Mist always hangs about it, and the Water drops very fast and in great Quantities. There are Lead Pipes laid from it to a great Pond, which is paved with Stone, and holds 20000 Tun of Water, yet is filled in one Night. There are 7 or 8000 People, and many more thousands of Cattle, all supplied from this Fountain. The great Pond communicates its Water to several lesser ones, which disperse it through the whole Island.

Azores,

Azores, three Islands, *Fayal*, *Pyco* and *Tercera*, otherwise named *St. George*, *St. Michael* and *St. Mary*. *Pyco* is like *Teneriff*, having a Peak far above the Clouds, and many hollow Places in its Sides, at which Smoke and Flame often evaporate, and proceed into the cool Rivulets, causing a terrible Noise. From the Sulphur Veins these Islands are very much subject to Earthquakes; the Towns of *Angra* and *Paria* were almost ruined by one in the Year 1614. The *Spaniards* report for a Truth, that an Earthquake added to these a new Island, which they named *Corvo*, being raised a good Height out of the Sea. Lat. 40.

Bermudas, Lat. 34. A little Cluster of Islands which have no venomous Creatures. There are many Spiders, but those not poisonous, and very remarkable for their Webs, which are so strong that they will catch little Birds. There are sweet Wells, such as are above the Surface of the Sea; but those lower are salt or brackish; and all of them have some sensible Flux and Reflux with the Sea. There is a remarkable Fish call'd the *File-Fish*, because a Part of his Back-bone exactly resembles a File. *Harris, Collier.*

The Isle of *St. Thomas* is under the *Line*. In the Center of the Island there is a Mountain cover'd on the Top with a Cloud, which furnishes Waters sufficient for watering the Sugar-Canes; and what is most remarkable is, that the higher the Sun comes above the Horizon, the more Water falls from the Cloud.

Here is a constant Equality of Day and Night throughout the Year. *St. Helen* is an Island belonging to the *English*, useful to touch at in the Way to the *Indies*, South Lat. 15. 12 m. distant from *Africa* 350 Leagues, and from *Brazil* 510. It is only seven Leagues in Compass, and yet so fruitful that it surpasses most of the Provinces of *Europe*; it is some Wonder that so small an Island should be so far from any Continent, and also far from any other Island.

America, New-England. Here is the *Butter-Nut*, whose Kernel yields a kind of sweet Oil, that hath an exact Taste of ordinary Butter. In *Barker's Cave* is found the *Scarlet Muscle*, which yields a Juice of pure purple Colour, that gives so deep a Dye that no Water can wash it out. Upon the Coast is taken the *Monk-Fish*, so called by the *English*, because it hath a Hood like a Friar's Cowl. There is the *Humming-Bird*, the least of all Birds; his Egg no bigger than a small Pea, and his Nest like a Bottom of soft Silk. *Boston*, Lat. 42, 15. Lon. 317.

There is a *Butter-Nut* in *Gresham-College*; it is in Length $2\frac{1}{2}$ Inches, in the Middle near $1\frac{1}{2}$ over, shaped something like a small Cucumber. It hath a Stone almost oval, and edged with six or seven Angles by the Length; the Spaces between the Angles, very uneven, with rugged Plates and Knobs. There is also the *Edged-Walnut* of *New-England*, near an Inch long, and as broad, above half an Inch thick, figured

red with eight Angles or Edges, whereof one half is sharper than the other; the Kernel as in the common Kind. Dr. Grew.

The Soil is so fruitful that an Acre yields two hundred Bushels of Corn. There is a sort of Berry which grows in great Plenty, and these boiled turn to a clammy Substance, of which they make Candles; they burn well, like Wax-Candles, and are of a greenish Colour. Here are wild Turkeys which usually weigh six Stone; and Mock-Birds, which counterfeit the Noise of all others. The *Indian* Wheat, which the Natives call *Pagatouu*, grows here in abundance; one Stalk bears three or four Ears laden with five or six hundred Grains, some yellow, some red, and of several other Colours. There is the *Elk* as big as a little Ox. The Natives are thought to be *Tartars* by Descent. The *Mowhacks* speak a Dialect of the *Tartars*, and, like them, have no Beards. Collier.

West from *New-England*, between the Lake of *Hurons* and that of *Illinovecks*, where these Lakes have a Communication, there begins a vast Ridge of Mountains, which run through the Country, from $46 \frac{1}{2}$ Deg. to 25. On the very Tops there are several large green Plains, one of them in the North-part like a Terras-walk, above two hundred Miles in Length. In *Hurons* there are vast Shoals of Fish, especially *Trouts*, as big as ones Thigh. There are strong Currents, which, at certain Seasons, run three Days East, two Days West, one to

the South, and four to the North, more or less; and in calm Weather they vary to all Points of the Compass in a Day. *Atlas.*

Between *New-England* and the Isle of *St. Laurence* there are many of that huge Creature called the *Sea-Moose* or *Morse*, of whose Skin excellent Buff is made. His Body is shaped like the *Sea-Calf*, but groweth to be bigger than an Ox. He hath four Feet, and drags the hinder Part after him like the *Seal*. In his upper Jaw he hath two Tusks bended a little inward. They come on Land in Companies, and, when they sleep, one of them, as among the *Cranes*, is set to watch. They climb upon Rocks by the Help of their great Tusks, wherewith, as with two Hooks, they hold themselves from slipping. *Dr. Grew.*

Maryland. Among other Shell-Animals, the *Signoe* is very remarkable, especially for its Eyes, which are placed under a Covert of thick Shell, but so order'd that the Part above the Eyes is transparent; so that the Creature can see its way, tho' otherwise he is blinded. These are somewhat like the Eyes of a Mole, which are cover'd with a thin Skin, to fit it for working under Ground; and both shew the wonderful Contrivance of Nature, which, as as *Mr. Ray* observes, is a Proof of their being ordered by a wise Mind, that is, the God of Nature. *Harris.*

Virginia. Here is a kind of Squirrel, which stretches a Skin out of his Sides, almost like the Wings of a Bat; by the Help of which he

he leaps farther, and alights more surely than the ordinary Sort, and therefore is called the *Flying-Squirrel*. The *English* first planted here at the Mouth of *Chefepiack-Bay*, 39 Deg. N. Lat. There is a sort of large Plumb like a *Medlar*, which, if not fully ripe, will draw a Man's Mouth awry, and put him to Pain in eating of it; but in its perfect State it is as delicious as an Apricot. There is the *Possum*, having a Head like a Swine; the Female has a Bag under her Belly, wherein she lodges, carries and suckles her Young.

In some Parts are dug up the Bones of Whales several Yards deep, and many Leagues from the Sea; a Proof of the Deluge having been there; as there are probable Tokens of the People coming from the North of *Asia*, because some of them much resemble the *Tartars*, altho' such as are more southward are larger Men, who might improve by a better Soil and warmer Climate. Between these Coasts and *Greenland* is the Whale-Fishing, by which ariseth a vast Gain from their Oil and Bone. The *Sword-Fish* is the Whale's Enemy; they surround him in great Numbers, and kill him by many Assaults; they only eat out his Tongue, and then leave him to be taken up by the Seamen. *Harris*.

The Whale is a wonderful Creature; those of ordinary Size are sixty-five Foot long and thirty-five thick; his Head is a third Part of him, his Tail about twenty foot broad, his Tongue very large. The Whale-bone lies within

within his Mouth on the upper Lip, of a brown, black and yellow Colour, sometimes two or three Mens Length, on each Side 250 Pieces. On the Top of his Head he has a Spout-hole on each Side, through which he blows out Water with such Violence that one may hear it at a League's Distance, and see it three Leagues off; which discovers him to the Fishers; and when he is wounded it roars like a Whirlwind. *He is King of all the Children of Pride, and teaches them to humble themselves before the mighty Creator.* Job 41. 34.

There is also the *Fin-Fish*, which is much of the same Length as the Whale, tho' three times less in Bulk. He has a Fin on his Back near the Tail. He has also a Blowing-hole, out of which he blows more fiercely than the Whale. His Lips are like a twisted Rope, and on the uppermost there is Bone like unto a Whale's. He is not so fat as a Whale; and more dangerous to be caught; the Seamen think him scarce worth the Labour. To fish for Whales, Ships go as far North as *Spitsbergen*, which is Part of *Greenland*, N. Lat. 80 Deg.

Spitsbergen. There is seen the Sea-Bow, not in a Cloud, as the Rain-bow; it is never seen but on a bright Day, in a kind of Atmosphere of the Sea-water, which being blown up by the Winds appears like a Fog. It is commonly seen before the Ship, and sometimes behind to the Leeward, over-against the Sun, in the Place where the Shadow of the Sail falleth; it appears of divers Colours, like the

the Rain-bow in the Clowds. There is the Snowy Star, which falls in the severest Frost; and another bright Phænomenon, which falls down like a Shower of Needles. *Harris.*

Mr. *Joseph Moxon* being in *Holland* heard a *Dutchman* say (which he believed to be Truth) that he had been under the North-pole, and found it as warm there as at *Amsterdam* in Summer; which seems to be strange. But some other *Dutchmen* affirmed, that they had sailed to Lat. 89, within one Degree of the Pole, where they met with no Ice, but an open Sea; which being not credited, they shewed four Journals, kept in two Ships, which testified the same, and agreed within four Minutes one of another. These Accounts, if true, make it probable that there is a North-East Passage to the *East-Indies*.

At *Smith's Island*, near *Newfoundland*, Captain *Frobisher's* Men found a dead Fish like a Porpoise, about twelve Foot long, with a Horn of two Yards long, growing out of his Snout; it is wreathed and straight, and is thought to be the Sea-Unicorn. It was brought to *England*, and placed in the Queen's Wardrobe. I suppose it is of the same kind with those found about *Iceland*, which have been before mentioned, and has been taken for that of the Land-Unicorn, which is found in *Æthiopia*, and has been also before described.

In Mr. *Fotherby's* Voyage near *Greenland*, Lat. 78. they saw a Light upon the Forebonnet, which the Sailors call a *Corpo-Sancto*;
it

it appeared like the Flame of a Candle, and (as Seamen observe) always presages a Storm; It was foul Weather all that Day, and was so vehement the Night following that the Sea oft-times over-rak'd the Ship. When great Fishes appear in great Numbers, leaping about a Ship, it presages a Storm; some call it playing; but, I imagine, says the Author, that this violent Motion proceeds from some Pain or other they are afflicted with against bad Weather.

Sir *Humphry Gilbert's* Voyage. There pass'd between us a very Lion to our thinking, in Shape, Hair and Colour; he turned his Head to and fro, shewing his long Teeth and glaring Eyes, and roared much like a Lion. The General took it for a good Omen, rejoicing that he was to war against such an Enemy, if it were the Devil. They afterwards met with a Storm, and in Lat. 50. there was upon the Main-Yard a little Fire in the Night, which Seamen call a *Corpusant* or *Castor* and *Pollux*; and is usually seen in great Storms. The Storm increased and the General was cast away.

Hudson's-Bay. There Mr. *James* winter'd; and tho' about the Latitude of *London*, yet it was extremely cold, and the Snow very deep. They built a little House, which was cover'd with Snow almost to the Roof *December 31*; and there appear'd, says he, more Stars than ever I had seen before by two-thirds. I could see the Cloud in *Cancer* full of small Stars,
and

and a great many amongst the *Pleiades*. These I suppose were seen by the naked Eye, through the Clearness of the Air ; for, since this Time the *Telescope* was invented, by which 72 Stars are discover'd within the Compass of the *Pleiades*, which opens a new Scene to the Prospect of Almighty Power, and shews an immense Space, which can only be measur'd by an infinite Being.

Newfoundland. Here it is very hot in Summer, yet very cold in Winter, by the Wind coming from the frozen Seas. Not far off there are Islands of Ice 60 Fathoms high ; and when the Sides next the Sun were melted, it would so alter the Balance of them, that the Bottom Part would rise upward, to the great Danger of those that were near them : Upon the Breaking of the Ice, which floated on the Sea in *May*, some Sailers have been enclosed with Ice sixteen Days together. *Trepassey* Harbour is the most Southern Part, Lat. 46.

The Soil is very fruitful, and without Cultivation produceth Plants, Fruits and Grain : Here the Beasts of Prey are more gentle than in other Places. Some of the Company having a Mastiff Dog, there came a Parcel of Wolves out of the Woods, and seated themselves pretty near them, making a terrible howling ; the courageous Dog went up to them, and instead of grinning and fighting they wagged their Tails and fawn'd, and at last play'd with the Dog, who went along with them, stay'd amongst them 9 or 10 Days, and then came

came to his Master safe and sound. This comical Scene was repeated three times; he took his Ramble with them, and, when the Frolick was out, came home again.

In these Seas is the *Mermaid*, one of which was seen by Capt. *Waitburn*. At *St. John's Harbour*, *A. D.* 1610, he spied a Creature coming towards him, which in all the upper Parts was like a Woman, the Hair excepted; but instead of that there were blue Streaks very like Hair round about the Head, and as it were hung down to the Neck: She seem'd to desire a Man's Company; but the Captain retired from her. She came afterwards to the side of the Boat, and attempted to come into it, but one of the Men struck her with an Oar, and made her tumble into the Water; another was seen by two of *Hudson's* Men, who saw her hinder Part; it was like the Tail of a *Porpoise*.

William Barent's Voyage: They were *May* 30 in *Lat.* 69. *June* 1, they had no Night; 2d, there was a strange sight, on each side of the Sun another Sun, and two Rainbows that passed clean thro' the three Suns, and then two Rainbows more; the one compassing round about the Suns, and the other cross thro' the great Rundle, which Rundle stood with the utmost Point elevated above the Horizon 28 Deg. from due East, the Sun elevated 48 D. 43 M. his Declination 22 Deg. 17 M. which added together make 71 Deg. for the Height of the Pole. *Harris.*

D.	M.
48.	43.
22.	17.
71	00

June

June 13, they were in 80 Deg. 11 M. and found a good Haven in *Greenland*, over-against *Nova Zembla*. There are Geese of a perfect red Colour, such as come into *Holland* about *Weiringen*; they found many of their Eggs; and till this Time it was never known where they hatch'd them: So that some have written that they set upon Trees in *Scotland*, and Eggs falling into the Water become young Geese. 'Tis no Wonder, says the Author, that none could tell where they breed, because no Man ever, that we have heard of, had been under 80 Degrees. Perhaps these may be the same that are called *Barnacles* before-mentioned.

They wintered in *Nova Zembla*, Lat. 76, where they saw some of the *Semoieds*, who told them that, after five Days Journey, they would come to a great Sea called *Marmora*, that is, the *Calm Sea*, but Ice stops the Way by Sea; their Ship was froze up. Nov. 1, the Sun was no higher above the Horizon than they could well see it. Nov. 2, the Sun rose at S. S. E. and set at S. S. W. when it was not full above the Earth, but passed in the Horizon along by the Earth. Nov. 3d, they saw only the upper Part of the Sun, tho' the Land was as high as the Mast of their Ship, and on the 4th they quite lost sight of the Sun; but the Moon shined continually.

They were much disturbed by Bears, and often in Danger from them; they kill'd several, their Skins twelve and thirteen Feet long: After the Sun departed, the Bears also disappeared;

peared ; and, what is very remarkable, the Foxes appeared, which they took with Traps, and they seemed good Food : They serv'd us for Meat, says the Author, as if God had sent them purposely for us, and their Skins serv'd for Caps to keep our Heads warm. *Dec. 26,* it was extreme cold, and the Sun being upon the Return, we found the Proverb true, *As the Day lengthens, so the Cold strengthens.* *Jan. 24,* we saw the Edge of the Sun, and 27, we saw it in its full Roundness.

They observ'd that they were five Hours East of *Venice*, each Hour being 15 Degrees, but these Degrees are short according to the Circle ; for it is also to be noted, that altho' a Degree, under the *Line*, be 60 Miles, yet in Lat. 76, it is not quite 16 ; because every Circle about the Globe is less, as you come nearer to the Pole ; and a Degree in the Heavens is larger, according to the vast Extent of the Circle ; for every Circle greater or less is number'd at 360 Degrees, for Conveniency in Calculations, no Number suffering more Distinctions without a Fraction than this.

March 21. Greg. Account. The Sun was in the *Equinox* elevated 14 Deg. which subtracted from 90 there rests 76 Lat. for the height of the Pole, there being no Declination : The Door of their House was often block'd up with Snow, and they digged it open again, till being weary of the Labour they went out at the Chimney Top : Being weakened by Purging, they were relieved by *Leple* Leaves, whose
great

great Virtue they had heard of in *Holland*: They misreckon'd three Days failing; the Cause of which Error was, that they were deceived by the Compass, which standing upon a Chest of Iron had varied two Points, whereby they were much more Southerly and Easterly than they thought they were.

Here I shall add some Observations upon the Sea Compass: The Loadstone is found in the *East-Indies*, particularly in the Kingdom of *Siam*. Near the City *Louvo* there is a Mountain of it. It is a wonderful Work of Providence which hath given such Virtue to a Stone, such a Relation to Iron, and such Affinity with the Poles, that it should have so large a Power as to extend its Effects from Pole to Pole, that it should direct to both, yet with some Variation, for the Exercise of Mankind, in the Application of so beneficial an Instrument.

The Earth is a great *Magnet*, which attracts all other Bodies towards its Center, with a particular Attraction of the Loadstone to its Poles, these being the principal Parts of its Surface. The Needle is as it were inspired with the Virtue of this Stone, and presents to us two strange Effects; the one its Polar Direction, by which it points out the true Poles, tho' not always exactly; the other is the Variation of the Compass; it is the Deflexion of the *Magnetick Meridian* from an exact North and South Line, declining either Easterly or Westerly, according to the Cause of that Declination, which is as yet a Secret: But this seems to be an Order

of Providence, for the Employment of Man's Observation.

Every *Magnet* hath two Poles, one pointing North, the other South; and, what is very wonderful, in the Northern Parts of the Globe, the South Pole of the Loadstone will raise up more Iron than the North Pole; these two Poles communicate their Power to the Needle, and on the South of the *Æquator*, the South Point of the Needle is attracted: There is another Wonder in the Loadstone, that its Strength will be increased by Use, or be diminished for want of Use; and this has been found by Experience.

Mr. *Haac*, Fellow of the Royal Society, having laid by a Loadstone for some Years, found it to have lost a fourth Part of its Strength, and consider'd with himself, that as Moral Virtue is improved by Exercise, and Animal Motions become more vigorous by Use; so it might possibly prove also in some Properties of inanimate Bodies: Whereupon he hung as much at his Stone as it would bear, and so left it for some Weeks, then adding more Weight, it easily held the same; and repeating the Addition of more Weight, at several times for the Space of two Years, he found that his Stone had not only recover'd its former Strength, but encreased it: For whereas before he had never known it to take up more than sixteen, it wou'd now take up twenty times its own Weight. Dr. *Grew*.

Now

Now we may very well make a proper Reflexion, and let the Loadstone return the Kindness: For as Moral Virtue hath hinted the Improvement of the Stone, the Stone should enforce the Improvement of Moral Virtue. The Benefit should be repay'd with Interest, and this should rather be put in Practice, as it is of much higher Consequence. The Author of Nature teacheth, by the Improvement of inanimate Beings, that the Mind of Man is to be improved; and as it is of much higher Value, so it ought to be improved by Exercise. The late Invention of this great Advantage of the Compass, to promote Trade and Commerce, shews the Divine Will, that God hath cut out Work for Man; that he should search into Nature, in which Treasures are to be found; and especially search into himself to find out more valuable *Treasures*.

Mexico-New: There is a remarkable Lake, having two sorts of Water, fresh and salt; the fresh is usually calm, and hath Fish; the salt is boisterous and hath no Fish. In the midst of the Lake is a Rock, out of which issues a Stream of hot Water, good against several Distempers. *New Mexico* is near 50 Leagues N. W. from *Old Mexico*, where are the richest Silver Mines: There is a kind of Deer so large, that they breed them up to draw Carriages, as we do Oxen and Horses. *Harris, Atlas.*

Mexico City is upon an Island in a great Lake; it is large and beautiful; there are in it several Gardens upon floating Islands, the Prospect of
Z 2 which

which is no less fine and agreeable than that of so many Houses ; there are large Plats of Ground, full of Herbs and Flowers, floating from one Part to another : There also are two sorts of Water from the Rivers running into it, the one salt and muddy, the other fresh and clear. The Quantity of Fish is so great that the Revenue of the Lake is ordinarily reckon'd at 300000 Ducats *per Ann.* Lat. 38.

This Country had another Name and other People : They have some Accounts by Tradition, and some Historians say, that the old Inhabitants were conquer'd and driven to the Mountains, where are still their Descendants, who retain a Tradition, that their Conquerors came from a North Country, and set out from thence in the Year 720. The first Company spent 80 Years in their Journey, but built Villages and sowed Ground as they came along, and another Party came in 902 ; it took its Name from *Mexico* the first Leader. There is no Account of the Place from whence they came ; the North is not now known, which lies West of *Hudson's* Bay, and farther North.

There is a Bird called *Pecuti*, no bigger than a *Quail*, but hath many Feathers of divers Colours ; it hath a Beak a quarter of a Yard long, and three Fingers broad towards the upper Part, which weighs more than its whole Body besides ; it is crooked and of singular Use in forming their Nests ; with it they bore a Hole in a Tree for their Nest, and therein defend themselves against the wild Cats, which
when

when they see coming, they whip into their Nests, and thrust their long Beaks out of the Hole; in that Posture they stand upon their Guard, ready to push at the Face of the Enemy; and the Cat dares not come within its Reach. *Harris.*

The *Matti* is a Bird somewhat bigger than our Thrushes, and shews no less Cunning and Contrivance to defend its Young. Their Nests are very large, and wide at the Bottom, growing gradually narrower to the Mouth, where the Hole is just big enough for them to enter; and this they defend with strong sharp Thorns, which they stick on all sides of the Passage; and are so strongly fastened about it, that no human Art can do any thing like it; so that the Cats can by no Means come at the Hole, to thrust their Paws in, nor reach the Bottom, unless they scratch them to Pieces.

The *Pintadelli* go quite another Way to work to defend their Nests from the wild Cats. They build always in Trees that hang over the Water, and in the utmost Parts of the Boughs; so that a Cat coming there, must expect to tumble into the Water, which the Cats, of all Creatures, most avoid. The Birds know not that the Cats are afraid of Water, but as they are the most devouring Creatures, and will let no Animals live in Peace about them, that are but within their Reach, Nature has taught these small Birds a Way to avoid them. *Dr. Grew.*

Thus the God of Nature manifests a Design, together with Wisdom and Power, which ena-

bles Creatures without Reason, to act as if they had Reason, to provide for their necessary Support. They are simple in any thing else, but sagacious in their own Preservation. The *Pecuti* have sharp long Bills to bore Holes, and for a defensive Weapon; and they, in a Manner, know how to use it. The *Matti* build very deep Nests, and fortify them with a Crown-work of Thorns; and the same Wisdom has taught the *Pintadelli* to make their Nests over the Water, where their Persecutors can never come.

New Spain. Guayca. Three Leagues from this Place there is a Tree sixteen Fathoms in Compass. In several Parts there is a Tree which yields Water, Oil, Honey and Vinegar, like some others before-mentioned. Nigh *Guatulco* is a great hollow Rock, which, having a large Hole on its Top, makes a hideous Noise at every Surge of the Sea, and spouts out Water, like a Whale, to a prodigious Height. There are several Springs so impregnated with certain Minerals, that the Water resembles Ink. *New Atlas*, N. Lat. 14. Here is the Fox-Ape, which has the Body of a Fox, Ears like a Bat, and Feet like Mens Hands; with a Bag under the Belly to carry its Young.

Nicaragua, a Province in *New Spain*, South from *Honduras*; the Capital is called *Leon*, N. Lat. 13. It stands upon a great Lake 130 Leagues in Compass, which sends forth a River Eastward to the Gulph of *Darien*, but it is not navigable because of the *Cataracts*; and the Lake

Lake is fifty Miles distant from the *South-Sea*, yet ebbs and flows like the Sea, having no visible Communication with it; it hath Plenty of Fish, but is infested with Crocodiles. About three Leagues from the City there is a burning Mountain, which every Morning and Evening sends forth a thick Smoak, and a prodigious Quantity of burnt Stones. In the same Province is another *Vulcano*, the Top of which is covered with fruit-bearing Trees, notwithstanding the Fire and Smoak it often casts forth. *Laet's History.*

Nicoya on the *South-Sea*. The neighbouring Gulph abounds with a kind of Shell-fish, which yields a purple Juice, wherewith they dye Wool, and Yarn to mix with *Segovia* Cloth, a City in *Old Spain*, where much Cloth is made. Near *St. John Guatimala* there is a *Vulcano* nine Miles high, I suppose, by the sloping and winding of the Way, which abounds with pleasant Springs, Gardens, Fruits and Flowers; and on the other side of the Town there is another *Vulcano* as dreadful, which vomits out Fire and Smoak, with terrible Roarings, and a Noise like Thunder; the old City was destroyed by it, and the new is frequently filled with fiery Ashes, tho' it be three Miles distant from it. *Gage, Atlas.*

Petapla, fifty Miles S. E. There is a Lake, on the side of which Salt appears every Morning, like a Frost, of which they make great Profit; as they do by grazing Mules upon the salt Soil about the Lake. *Vera Pass, N. E.*

Here is a liquid Amber, which drops from Trees, and is much esteemed. It is nourished by much Rain, which continues nine Months in the Year. *Honduras* Province is East from *Vera Pass*, and North from *Guatemala*, along the Gulph of *Honduras*. In many Places they have three Crops of *Maiz* in the Year. The Vineyards bear twice a Year; for immediately after the Vintage they cut them again, and the second Grapes are ripe before *Christmas*. *Collier, Atlas.*

Truxillo, the chief Town in *Honduras*; a beautiful City and Bishoprick, within a Mile of the Bay of *Mexico*, upon which it hath an excellent Haven. There is an admirable Plant called *Muguey* or *Maquey*, which furnishes small Wine, Vinegar, Honey, Needles, Thread, Stuffs and Timber. Their Bird *Cincon*, less than a *May-bug*, covered with wonderful Feathers, feeds, as they say, upon Dew and the Smell of Flowers; and, fastening itself to a Bough in *October*, sleeps there till *April*. In *Mexico* Country or *New Spain*, there are Silver Mines, in which above 4000 *Spaniards* work, with a great Number of Slaves; and there is a Mountain, out of which is got some *Jasper* almost like *Porphyry*, which is a red kind of Marble. *Collier.*

Mexico-Old is the chief City of *New Spain*, Lat. 20. It is near a Lake, whose Water is salt, because of much Nitre at the Bottom; and this Lake joining with another, both are above thirty Leagues about. It produces a
kind

kind of Fishes without Scales, having four Feet, and privy Parts much like Womens, as also their monthly Flowers; the *Spaniards* call them *Juguete de agua*, and the Natives call them *Axolotl*. The great River *Mississippi* falls into the Bay of *Mexico*; the *Maiz* on the Banks of this River ripens in sixty Days after it is sown. There are very fine Cedars, and Cotton-trees so tall, that the Natives make *Piragoes* of an hundred Foot long out of one Piece of their Trunks. In those Seas is the *Sea-Spider*, said to be bred of the Foam of the Sea. She angles for small Fishes with certain Strings or Threads, which she casts round about her like so many Lines; and, when her Web fails, she kills with an infectious Vapour. *Collier, Atlas.*

Cuba, a great Island in the Gulph of *Mexico*, opposite to *Florida*; *Havanna* is the chief Town, and the Rendezvous of Ships bound for *Spain* from all Parts of the Gulph. Here they tarry for one another till, all being met together, they sail hence by the Streights of *Bahama*. It lies betwixt Lat. 21 and 23. Here are Cedars so large, that Boats for sixty Men are made out of one of their Trunks; and many odoriferous Trees, that yield a Gum as valuable as *Storax*, which is an *East-India* Gum or Incense, good against a Cough and Hoarseness. The most rare Fruits are *Camitoes*, resembling Oranges; the Pulp white and red, and of a sweet Taste; and *Guanavanaes*, shaped

ed like a Heart; and their Taste is a Mixture of sweet and sour. *Collier, Atlas.*

Havanna is reckoned the strongest Place belonging to the *Spaniards*, yet it was taken by the *English Buccaniers*, under Capt. *Morgan*, in 1669; who would have kept it, if they could have had the King of *England's* Protection. At this time it is to be considered of, Major *Smith*, who was Prisoner here in 1665, proposed the Conquest of it, which, he thought, might be easily effected by a few Regiments from *Jamaica*; and that would make the *English* Masters of the *American* Trade, and capable of intercepting the *Spanish* Fleets. He says it is impossible for their great Ships to turn up to Windward from the Bay of *Mexico* or *Porto-Bello*, without being separated. He adds, that they have a peculiar Dread of the *English*, because of an old Prophecy, That they shall be Masters of it. *Atlas.*

Carolina. Here is the *Live Oak*, which is an *Ever-green*, and very durable Timber. The Acorns of it are as sweet as Chestnuts; and the *Indians* draw an Oil from them as sweet as that from the Olive, tho' of an Amber Colour. With these Nuts or Acorns some have counterfeited the *Cocoa*, whereof they have made Chocolate, not to be distinguished by a good Palate. They make very fine Pork. There is the *Chestnut Oak*, a lofty Tree, clear of Boughs, sixty Foot; there are some so high that a good Gun cannot reach a Turkey, tho' loaded with Swan-shot.

shot. They are called *Chestnut*, because of the Largeness and Sweetness of the Acorns. Hist. of *Carolina*, p. 91, 92.

There is the *Tulip-tree*, which is somewhat like the Poplar. It bears a white Tulip; the Buds, made into an Ointment, cure Scalds and Inflammations; Cattle are apt to eat them, and they give a very odd Taste to Milk; they grow to a large Size, some to ten Foot Diameter. I have been, says the Author, told of a Tulip-tree, wherein a lusty Man had his Bed and Furniture, and lived in it till his Labour got him a more fashionable Mansion. He afterwards became a noted Man for Wealth and Conduct. There is the *Sassafras-tree*, which grows to two Foot Diameter; it bears a white Flower, which is very cleansing to the Blood, being eaten in the Spring with other Sal-lating. p. 94.

There is the *Sugar-tree*, one of the most remarkable; it is like one sort of Maple. It is of a very tedious Growth, but is found plentifully at the Heads of Rivers. The *Indians* tap it, and use Gourds to receive the Liquor, which Operation is done at distinct and proper times; when they have gotten enough, they carry it home, and boil it to a just Consistence of Sugar, which grains of itself, and serves for the same uses as other Sugar does. There are many sorts of Fruits which grow naturally, several sorts of Grapes, and one called the *Fox-Grape*, which grows in low Lands, and ripens in the Shade. There is also a *Winter Fox-Grape*, both of black
and

and white sorts, of which one Tree will produce eleven or twelve Bushels. p. 102.

The *Wild-Cat* is quite different from those in *Europe*, being larger, more nimble and fierce, spotted like a Leopard, and preys like the Panther, takes his Prey by Surprise; he quickly mounts a Tree, and thence directly leaps upon it. Thus he even takes a Deer, which he cannot catch by running, nor conquer by Force; he leaps upon his Back, fastens his Teeth upon his Shoulders, and sucks out his Blood. The Deer runs with him till his Strength fails him, and then falls down a Prey to the Enemy. He destroys Hares, Birds, and all he meets with that he can conquer. His Fur is useful to wear as a Stomacher, for weak and cold Stomachs. It is likewise used to line Muffs and Coats in cold Climates.

There is the *Bald Eagle*, so called because his Head and Tail are as white as Snow. They are heavy of Flight, and cannot get their Food by Swiftnes; but they are attended, as the Lion with a Jackal, with a kind of Hawk, that catches Fish and suffers the Eagle to take them from her, altho' she is a swift Flyer, and can make far better way than the Eagle in her Flight. This Eagle also steals young Pigs, which he carries alive to his Nest; and the poor Pig makes such a Noise over-head, that Strangers hearing them cry, and not having seen the Fact, have thought there were Flying Sows and Pigs in the Country. His Nest is big enough to fill a handsome Cart. The
Fishing-

Fishing-Hawk is two-thirds as big as the Eagle.

The *Humming-Bird* is the Miracle of winged Animals. He is feathered as a Bird, and gets his Living as the Bees, by sucking the Honey from each Flower. In some of the largest Flowers he will bury himself, to suck the Bottom of them, so that he is quite covered, and often-times Children catch them among the Flowers. He is much less than a Wren, and his Eggs are no bigger than Peas. His Nest is one of the greatest Pieces of Workmanship the whole Tribe of winged Animals can shew; it hangs upon a single Briar, most artificially woven, a small Hole being left to go in and out at. The Cock is one of the greatest Beauties, red, green, with other Colours mixed. p. 145.

There is the Land and Water *Terebin*, which are kinds of Tortoises; the latter about as big as a Pullet, and extraordinary Meat; the former is much larger, and an utter Enemy to the Rattle-Snake; his way to deal with him is admirable; for when the *Terebin* meets with him, he catches hold of him a little below his Neck, and draws his Head into his Shell, which makes the Snake beat his Tail, and twist about with all the Strength and Violence imaginable, to get away; but the *Terebin* soon dispatches him, and there leaves him. Their Food is Snails, Tadpoles or young Frogs, Mushrooms, and the Dew and Slime of the Earth and Ponds.

New

New-London is in N. Lat. 32. Here is the *Rattle-Snake* as in other Parts of *America*, but none so provided for destroying those noxious Creatures: For besides the *Terebin*, there is the *Black Snake*, an utter Enemy to the *Rattle-Snake*, and in all other Respects harmless. He has a very limber Neck, which he twists about the *Rattle-Snake's* Neck, holds him fast, and whips him to Death with his Tail. He comes into Houses, and does some Damage for his Food; he skims the Milk and swallows Eggs; but in these he is excused, and no Body hurts him, because of his good Services in the House as well as abroad; for he is the best Moufer that can be, and leaves not one of those Vermin alive wherever he comes. They have excellent Bacon; the Hogs are fed with Peaches, Nectarins, Apricots, which grow naturally in the Woods. *Atlas.*

Carolina joins upon *Virginia* to the North, and the South-part of it is now called *Georgia*, which joins upon *Florida* to the South; and between the main Land and the Island *Bahama* is the Gulph of *Florida*, through which the *Spanish* Ships pass from the *Havanna*. There is a certain Season for their Entrance, which they are obliged to wait for, otherwise the Current is so strong they cannot pass. In this Island is the famous Spider, the largest of that Species; it is two Inches long, and hath six Eyes, which are not so big as the smallest Pin's Head; there are some of them in *Gresham-College*. *Dr. Grew.*

The

The *Rattle-Snake* has been mentioned before; but here it is to be further observed, that the Rattle is at the End of their Tails, which is a Connexion of jointed Coverings of an excrementitious Matter, somewhat like a Man's Nail, and each Cover is very thin. Their Bite is very venomous, but they never attack any one, unless molested or trod upon. They have a strange Power to charm Squirrels, Partridges, Hares, or any such thing, in such a Measure that they run directly into their Mouths. This I have seen, saith the Author, by a Squirrel and one of these Rattle-Snakes. They cast their Skins every Year, which are used in Physick; and the Rattles are accounted good to expedite the Birth. *Hist. of Carolina.*

Here is the remarkable Creature the *Racoon*, about the Bigness of a Cur-Dog, which is a natural Crab-Catcher, and lives upon that Food and upon Oysters. He finds out the Crabs Beds, lets his Tail hang in the Water, which the Crab takes for a Bait, and fastens his Claws therein; then the *Racoon* jerks him out, and cracks him to Pieces on the Shore. There is also a sort of *Land-Crab*, which runs into a Hole from the Pursuer. The *Racoon* takes this Crab, by putting his Fore-foot into the Hole, and pulling him out. He is easily tamed, being taken young, and will follow his Master like a Dog, yet loseth not his Skill; and it is a Diversion to go out with them, to catch Crabs.

Here

Huron: They build Dams and Houses about the Lakes for their Habitations, and are the most ingenious and industrious Artists of all four-footed Creatures in the World: If you take them young, they will become tame and domestick, but love to be in in some waggish Action; they will break Trees, and block up your Doors, in the Night, with the Sticks and Wood they bring thither, as if they had a Sense of playing Tricks; their Food is chiefly the Barks of Trees and Shrubs; but if they eat any thing that is salt it kills them: Their Flesh is good Meat, especially the Tail, which is held very dainty; their Furs are good for several Uses; and they wear Shoes of their Leather in *Carolina*.

The *Beaver* is a Creature of wonderful Sagacity; he is 26 Inches long from the Neck to the Root of the Tail, about a Yard and eight Inches round, his Tail is 14 Inches long and 6 broad: They build themselves Houses for Shelter and Security in Winter-time; they raise a Bank for Convenience, and make Kennels with notable Contrivance; they constitute a Body Politick, and form a kind of Common-wealth. A hundred join together, and carry Clay and Earth upon their Tails; they cut down thick Trees with their Teeth, always such as hang over the Water; and their Art of making them fall upon the Water is very surprizing: They mind the Time when the Wind can assist them, to make the Tree fall more easy, and which way they would have it: They drag them a-
way

way as they swim, and range them across in the Bottom of a Meadow; then they load themselves with Grass and Earth, which they lay between the Trees with so much Art, that the most skilful Bricklayer can hardly make a stronger Wall. In the Night they are heard to work with so much Vigour, that one wou'd think them to be Men at work: Thus they make Banks of 500 Paces long, 20 Feet high, and 7 or 8 thick: They always set Centinels to watch, who cry out to give Notice when they hear any Noise, then they all plunge into the Water; however the Natives take them by Hunting, or by Traps baited with Pieces of red *Asp. Atlas*.

Mr. *Boyl* saith of the *Beaver*, that the Accounts of sober and judicious Persons, reported to himself, are sufficient to give one just Cause of Wonder: That with their sharp Teeth they cut Pieces of Wood so as to make them fit for their Purpose, that by associating their Labours they lay these together so as to build themselves strong Winter-Houses, in which there is sometimes a kind of second Story for the Inhabitants to retire to, when the Water chances to overflow; that for these Houses they chuse a very convenient Situation, just by some River or other Water, that can furnish them with Fish; and that the Hole is placed just by the Water, that they may immediately flounce into it, and save themselves when their Houses are attack'd; and, to facilitate their swimming away, Nature hath furnished them with two

Feet, not made like those of Dogs or Cats, or like their own two other Feet, but having broad Membranes betwixt the Toes like the Feet of Geese, Ducks and other Aquatick Animals, that are to use them as Oars, to thrust away the Water, and facilitate their Motions in it. *Boyl's Final Causes.*

Canada joyns upon the *Iroquese* and the Lake *Huron*. The chief Town is *Quebeck*, Lat. 46. It is a *French* Plantation, West from *New England*, and hath *Hudson's Bay* West from it: There is the *Michibichi*, a sort of Tyger less than the common Tyger; as soon as he sees a Man he runs away, but attacks all brute Animals, and easily conquers them; and, what is peculiar to this Creature above all others, when the Natives hunt Bears or wild Beeves, he runs then to their Assistance, and sallies out with Fury upon the hunted Animal. The Natives, says the Author, had rather die than kill one of them.

Nova Scotia, now called *Acadia*, borders upon *New England*, and stretches to *St. Laurence River*, which runs up to *Quebeck*, having *St. Laurence Bay* between it and *Newfoundland*, the North Point, Lat. 51. There is a kind of *Pine Tree* which affords good Medicines; upon the Bark there grow up and down many Knots, about the Bigness of a Horse-Bean, hollow and filled with a liquid clear and fragrant Turpentine, which, as it drops, the Natives gather and use as the Balsam of *Peru*. *Dr. Grew*. The chief Town, formerly call'd *Port-Royal*,
is

is now named *Annapolis*, after the late Queen of famous Memory ; to whom the Province was yielded by the late Treaty with the *French*. *Atlas*.

Jamaica, Lat. 18, at the Entrance of the Gulph of *Mexico* near *Hispaniola*. There is the Mountain *Cabbage*, which is like a tall Tree, having only one great Cabbage on the Top; the Stalk or Trunk consists of many thin fibrous Rings ; it is a sort of *Palm Tree*, and grows also in *Barbadoes*, where, as it was told to Mr. *Stubs*, there was one about 300 Feet high, that is, about thirty Yards higher than the great *Dorick Pillar* in *London*, called the *Monument* ; the young tender Sprouts of one Year are eaten both boiled and raw, and are both Ways excellent good Meat. Dr. *Grew*.

There is the *Manati*, a Fish, having a Head like that of an Ox, his Body long like an *Otter*, has two Feet like an Elephant's. Some are about twelve Yards long and four broad ; it is called the *Sea-Cow*, and feeds upon Grass on the Banks ; calves and suckles her young with two Dugs. A certain *Indian King* kept and fed one of them with Bread six and twenty Years in a Lake, near his House, which grew tame, beyond all that the Ancients have written of *Dolphins* : He would sometimes carry ten People on his Back with Ease a-cross the Lake. They breed also in *Hispaniola*, *Brazil*, and other Places. There is the Head of one of them in *Gresham College*. Dr. *Grew*.

There is the *Sea-Tortoise*, which differs from the *Land-Tortoise*, in having a more rude Shell, and Feet somewhat like the Fins of a Fish, and in greater Bulk. In the Island *Cuba* they are so large that they will creep along with five Men upon their Backs; he squirts the Water out at his Nostrils, as the Dolphin does at his Spout: They take them by turning them upon their Backs with Staves, from which Posture they cannot rise, and, as they lie, they sometimes fetch deep Sighs, and shed abundance of Tears; they are excellent good Meat; and are sometimes big enough for one to dine fourscore Men. *Dr. Grew.*

This being a hot Country, and partly wanting fresh-water Springs, Providence hath here also provided a Tree which affords Water, and different from those before-mentioned; it is called the *Wild Pine*. From the Root arise Leaves, after the manner of Leeks, two Feet and a half long, which close together in the Middle, but leave a hollow like a Bottle; at the Top the Leaves spread and receive the Rain, which falls into the Cistern below, holding about a Quart; this is drawn out by sticking a Knife in the Bottom. *Mr. Dampier* says he has been often relieved by them. *Ray's Wisdom.*

In those Parts is the *Star-gazer*, so called, because he looks directly to the Sky. This Fish hath a slender membranous String in his Mouth, which he projects and draws in at Pleasure, as a Serpent doth his Tongue; with this he decoys

coys little Fishes, and then preys upon them. For plunging himself in Mud, and then lifting up his Head a little, he casts out the said String, which the little Fishes taking for a Worm and nibbling at it, he immediately plucks them both in together. *Rondeletius* saith he hath seen him. Dr. *Grew*.

Barbadoes. Here Parrots breed in abundance, and fly in Flocks like Clouds: They have hooked Bills, by which they catch hold of Boughs; they have broad, thick and muscular Tongues, by which they are more fit to learn to speak; their Feet have two Toes before and two behind, with which they bring their Meat to their Mouths, and that after an odd Way, *viz.* by turning their Foot outward. In their Checks, in each Nostril, and on the Top of their Heads, there is a Tumour, where in *August* there breeds a Worm, all which in a little time fall out of their own Accord, without any Sign left of their ever being there.

The great Trade here is in Sugar, of which there is also much in *Jamaica*. The Sugar Cane is about seven or eight Feet high, with many Joints, one about every half Foot. The way of ordering the Sugar and refining has been much improved since the ancient times. It is a Mistake of *Matthiolus*, that our Sugar is the same in Substance with that of the Ancients, this being the simple Juice of the Cane, ours a compounded thing, always mixed with the Salt of Lime or of Ashes, and sometimes of Animals. The finest Sugar is made with

A a 4

Lime-

Lime-Water and Whites of Eggs. Lat. 13.
Atlas.

Hispaniola, a large Island. There is a Creature called *Cayman*, a kind of Crocodile, seventy Foot long and twelve round. They will lie floating upon the Water like a Piece of Timber, and nimbly snatch at the first Man or Beast that comes. What is more surprizing, they will swallow two hundred Weight of Stones, to render themselves more heay, the better to stifle their Prey after they have plunged it under the Water. One of them took a Man and plunged him under Water; but he having a Knife, gave him so many Wounds in his Belly that the *Cayman* expired upon his Body. He open'd him and found in his Stomach a hundred Weight of Stones as big as a Fist.

Bluefield-Bay. There are *Porcupines* of monstrous Bigness, which are armed with hard Quills upon their Backs, and can throw them out at Pleasure in their Defence; there is a Stone in the Head more precious than the Bezoar against Poison; there is Store of Monkies. It was a Pleasure, says the Author, to see the Monkies, as soon as one of them was wounded, to flock together, some laying their Paws on the Wound, others to thrust in some Moss to stop the Blood, whilst others gathered some Herbs, and chewing them in their Mouths, applied them like a Poultice. *Harris.*

Bay of Campeachy. In the Country there is Plenty of *Log-wood*. In the Bay there is the *Sucking-Fish*, of the Size of a large *Whiting*.

From

From the Head to the Middle there is a large grizly Substance, like the Head of a Shell-Snail. This Excrescency is oval, seven or eight Inches long, and six broad, and half an Inch high, composed of small Ridges, where-with it will fasten itself to any thing like a Snail. In fair Weather they swim about a Ship, their Food being the Filth that is cast over-board; and in bad Weather they fasten to the Vessel. Perhaps this, says the Author, may be the *Remora* of the Ancients, which is said to stop a Ship.

It is thought now to be a Mistake that the *Remora* stops a Ship. Mr. *Misson* thinks the Story to be a Fable. I am sure, says he, I have seen no less than twelve of them in several Places; but never two of the same kind. It does not follow from Mistakes that there is no Truth in the thing. Dr. *Grew* supposes that they might affect a Boat, and from thence the Story might advance to a Ship. I shall add a Conjecture, that a Multitude sticking to a Ship might somewhat retard its Motion. At *Leyden*, amongst other Rarities, there is a *Remora*, a small round Fish, with a Tail and Head somewhat like a Bird, the Skin prettily mark'd in Hexagons. It is said to stop Ships in their Course. *Wright's Travels*.

Island Blanco, farther Eastward towards *Barbadoes*, N. Lat. 12. 30 m. There is a Creature called *Guiano*, of the Bigness of a Man's Arm, with a small long Tail, which if you take hold of near the Body, it will come off

off at one of the Joints. Its Shape in the Body is like a Lizard. On the main Land near this Island there is a Village called *Varina*, famous for its Plantations of *Tobacco*, reputed the best in the World; it belongs to the *Spaniard*, in the Country called *Terra firma*, part of the Southern Continent. In that Coast also is the *Sucking-Fish*. *Harris*.

Terra Firma, upon the Coast near *Suranam*, a Dutch Settlement, Lat. 4. There is a Fish called by the Mariners the *Old Wife*, but by others the *Square Acarauna*, because its Figure is almost a compleat Square. Part hereof is *Guiana*, where Sir *Walter Rawleigh* made his fruitless Attempt. In the Rivers here is a small Fish, about the Bigness of a Smelt, which hath four Eyes, two on each Side, one above another; and in swimming it is observed to keep the uppermost two above, and the other two under Water. There is a Fountain of a pitchy Substance, preferable to the common sort in these hot Countries, being able to resist the scorching Heat of the Sun, and therefore used for trimming of Ships. *Manoa* in *Guiana*, N. Lat. 2.

St. Martha, N. Lat. 12. From hence a few Miles into the Country is a vast peaked Mountain, by some thought to be higher than *Teneriff*. It is to be seen fifty Leagues at Sea. Near it is *Rio la Hacha*, from which River's Mouth about five Leagues at Sea there is a Pearl-Bank, that is, a Sand under Water, on which there is abundance of Oysters that have

Pearls

Pearls in them. The *Indian* Divers go down with Baskets, and fill them in a short time. In the same Latitude, about eighty Leagues along the Coast, is *Carthagena* to the West, which comes near to the *Isthmus* of *Darien*, in which is *Porto-Bello*; and on the opposite side, about ten Leagues Distance Westward, is the City *Panama*, on the Coast of the South-Sea. To this Place they bring prodigious Quantities of Silver from *Mexico* and *Peru*, which is sent from hence by Land to *Porto-Bello*, where is held the greatest Fair in the World, nothing being more frequent than to hear, that in forty or fifty Days time there has been sold of *European* Commodities to the Value of 5000000 *l.* ready Money. After the Fair the *Galleons* return to *Carthagena*, where they buy up abundance of *Indian* Goods, and thence to the *Havanna*, and from thence to *Cadix*.
Harris.

In the *Isthmus* there is an Animal called *Manipouryes* by the *Indians*, by other People *Trefoil*, because each of his Feet make an Impression like that Plant. It is as big as a small Bullock, but with shorter Legs and Hair. It walks on the Bottom of the Water as well as on dry Ground. Its Head is like that of an *Ass*, but the Nose somewhat sharper. There is a Bird called *Harat*, like a Parrot, but much larger and more beautiful. It hath a long Tail, which, as its Wings, is of a light flaming Colour.

Peru.

Peru. There are several medicinal Drugs, of which the famous Balsom of *Peru* is made. Besides the vast Quantity of Gold and Silver, the Ground is exceeding fruitful, and produces three Crops of Corn and Wine every Year. The *Maiz*, or *Indian Wheat*, hath a strong Stalk, which is jointed like the Cane, and grows to the Height of six or eight Feet. Besides the uses of the Flower, the Stalk is full of sweet Juice like that of the Sugar-Cane. There is a small Bird called *Tomineios*, no bigger than the wild Bee; and another Bird so large that they will seize and devour a Calf.

Cusco the chiet City. When the *Spaniards* first came there, they found strong large Buildings, the Gates made of entire Stone, and the Work very curious, such as the present People could not perform, nor had Instruments fit for it. Whence it is supposed that there had been formerly a polite People, which had been conquer'd and driven away by *Barbarians*. There is the Desert of *Punas*, which Travellers endeavouring to pass are benumb'd, and suddenly fall down dead; which makes that way wholly neglected of late. Lat. S. 13. 5 m. *History of Peru.*

Besides other Cattle they are well stock'd with Sheep, which commonly weigh 250 or 300 Pounds. These they use for Carriage; for they will kneel down, and take up two Jars of twenty Quarts each, and when they are to be taken off they will do the same to be discharged of their Burden. There is the *Lantborn-Fly*, an Insect of considerable Bigness, which

which hath a shining Property in the Dark, appearing like a little Lanthorn. The Natives fasten a few of them on a Stick, and thereby clearly see their Way in the Night. *Potosi*, S. Lat. 21. 10 m. The Fort of *Cusco* is surprizing; it consists of so large Stones, each like a Rock, one, the biggest of all, was brought fifteen Leagues by the Labour of 20000 Men. See *Harris*, 1 Vol. p. 779.

At *Ingua* there are several Baths, where there is a Stream of Water almost boiling hot; and hard by another Stream as cold as Ice. There is another Fountain which hath a considerable Stream, almost as red as Blood. *Quito* is a very large City, and reckoned the richest Place for Gold in all *Peru*. On the Coast there is the *Cat-Fish*, with which that Sea swarms. It is like a *Whiting*, but hath three Fins, one on the Back and one on each Side; and they have each a Bone, wherewith if they strike into the Flesh, it frequently proves mortal.

Ghili, a large Country along the Coast of the South-Sea, which also hath much Gold and Silver. *St. Jago*, Lat. 32, 40. There is also the *Cabbage-Tree*, which is usually twenty two Foot high, has some Branches at the Top, and one Cabbage between them. When the Fruit is taken the Tree dies, therefore they always cut it down to get the Fruit. *Baldavia*, Lat. S. 39, 30. Thirty Leagues from Sea are those rocky Hills called *Andes*, where they get Gold; and there is a Rivulet falling from them whose Sand is mixed with Gold. These Moun-
tains

tains run in one continued Ridge from *St. Martha* to the Streights of *Magellan*. *Harris*, Vol. 2. p. 812. *Sir John Narborough's Voyage*.

The Islands of *St. James*, two in Number, S. Lat. 22. 30 M. Here is a great Difference of Tides; the Water rises and falls about five or six Feet, and only once in 24 Hours, as it is in all the Coasts of *Brazil* and other Parts of the *West-Indies*; so it is upon the Coast of *Peru* and *Chili*, except where there are great Bays or Indraughts, and there the Tides keep their ordinary Course of twice in 24 Hours. It is hard to account for this Inequality of Tides; it seems not probable that the Moon should be the Cause, and can have an Influence so different and so various in other Countries.

Guiaquil in *Peru*. Here is plenty of *Sassa-parillo*. This is the first Place in *Peru* where it rains, S. Lat. 3 Deg. From hence Southward 600 Leagues there falls no Rain in the low Lands, but it falls upon the Mountains and goes no further; from whence many Rivers run, and the Inhabitants let them into the Fields by Sluices: But these Rains are not sufficient to produce all the Water that is constantly running down, neither is there continual Rain upon the Hills; therefore the chief Supply must needs be from the Sea, which must return as much as it receives.

Brazil. There is the *Rattle-Snake*, whose Bite kills in 24 Hours. It is a remarkable Providence, that those Creatures give timely Notice to avoid them by the Noise of the Rattle

de in their Tails. There is the *Boycininga* or the *Bell-Snake*, about 13 or 14 Spans long, which is very poisonous, and also exceeding swift to take his Prey, yet not so successful as other Creatures. For, says the Author, Nature has formed a Bell in his Tail that gives Warning of his Approach; the other has several Rattles in Joynts like hard Pease; and it is said so many as he is Years old.

There is the *Ant-Bear*, a very remarkable Creature, which feeds upon *Ants*, and takes many at once with his Tongue, which is like a Lute-string, as thick as a Goose Quill, more than two Feet long, and lies double within his Mouth in a Channel; he darts it out on a sudden among them, and quickly rakes in a great Number from a Tree, when he finds them wandering there; but Nature has taught them a Defence; they work up great Hillocks of a Man's Height, of so hard Earth, that it is like Stone. *Oviado* saith he made some of them be broke open, but they wou'd hardly yield to Pikes of Iron: Under this hard Shell lie the *Ants* in infinite Numbers, very well screen'd from the searching Tongue of the Enemy. *Harris, Ray's Wisdom.*

There is a Bird called *Anbima*, or the *Unicorn-Bird*, because it hath a kind of Horn growing out of its Forehead two or three Inches long. There is a small *Crocodile* which breeds in *Brazil*, of which sort they have a Skeleton in *Gresham College*, which, with Part of the Tail that is broken off, is about a Yard long. Of this

this kind *Linschotten* saith that they will come into Houses and let the Children play with them harmlesly. There is another not so tame, about two Yards and a half long, which they hunt for the sake of their Fat; these are much like a Lizard. Dr. Grew.

There is a *Scaly-Lizard*, about a Yard and a half long; he is all over, except his Throat, Belly, Part of his Legs, cover'd with Scales, very thick and as hard as the most solid Bone; the Basis of each Scale of a blackish yellow; he is said to be a most tame and innocent Creature; which is very likely, according to the way of Nature, which usually leaves dangerous Animals, as Serpents and other hurtful Lizards, naked, but defendeth the Bodies of fearful and harmless Creatures, as the Tortoise, the Tatu, and the like, with Armour. Dr. Grew.

The *Sea Curlew*, by the *Brazilians* called *Guara*, is about as big as a Heron; it is long-legg'd, short-tail'd, with a Bill long, slender and crooked like a Scythe: But that which is most remarkable is the Alteration of his Colours, being at first black, then Ash-colour'd, next white, after that scarlet, and last of all Crimson; which grows the richer Dye, the longer he lives. The *Shovler* or *Spoonbill* is about the same Size; he feeds upon Shell-Fish, wherewith having fill'd his Crop, he lets them lie there till the Heat of it makes them open; whereupon disgorging them, he picks the Meat out of the Shells. Dr. Grew.

Here

Here are several kinds of Serpents. *Anthony Knivet*, who was one of *Capt. Candish's* Company, relates several things remarkable: One kind of Serpents have four Legs and a long Tail, like a Crocodile, and are preying ravenous Creatures. It is a remarkable Instinct of Nature, that they hide their Tails that they may not be discover'd when they watch for their Prey, and lie very still and close upon the Ground. They have two short Fins on the fore Quarters, which they suddenly dart out, and strike the Creature that comes nigh them. *Harris.*

The Monkeys here are as big as an ordinary Spaniel, of a black Colour, having a Face very like human, and a very long Beard. You may see twenty or more of them on a Tree; and one of them walks up and down with his Paw upon his Beard, chattering and making a great Noise, whilst all the rest are mighty still and quiet, as if they listened to the Discourse of that preaching Monkey. These Creatures seem to have changed with the Men, for hereabout the Men have no Beards, nor any preaching amongst them. *Harris.*

The People are Man-eaters, of which, says *Knivet*, I saw several Instances, viz. of eating Enemies taken in War, and himself narrowly escaped that Fate, being sometimes taken as a Prisoner. He travelled many Days, and passed the furious River *Paracyna* into the Country of the *Molopaques*. This People (says he) differs from all Savages that he had seen, in this Point,

that they had Beards like Men of other Countries; whereas amongst all the Nations of *Brazil*, you will hardly find any one People that shew any thing considerable of this Token of Manhood.

Brazil lies on each side of the Tropick of *Capricorn* to 40 Deg. S. Lat. joining to the *Magellanick-Land*, which includes the *Patagons*, and with the Island extends to 58 Deg. The Seasons differ from ours accordingly. The Summer begins in *September* and ends in *February*; the Winter begins in *March* and ends in *August*. *Pernambuco*, S. Lat. 7 Deg. 30. *Spirito Sancto*, S. Lat. 19, 20. Cape *St. Maria*, 35 S. Lat. where is the Mouth of the great River *la Plata*, and within is *Buenos Aires*, the chief Settlement of the *Portuguese*. At 39 Deg. is Cape *St. Andrew*. *Harris*.

In these Countries there is a Tree not named, having large Boughs, wherein are many Holes, some the Length of a Man's Arm, and are full of well-tasted Water both Winter and Summer; they are scatter'd about the Country, and a great Relief to Travellers. This seems design'd by Providence to shew itself even in barbarous Countries, by disposing up and down such Funds of Water in the inland Parts, where other Water is not found. There is a two-headed Snake, which is said to be blind, and to live under Ground like a Mole. Its Length is about fourteen Inches, with a Head at each End. They have a poisonous Bite, but seldom do any Harm, because they cannot see to go abroad. There

There is a Gum highly valuable; it is black and brittle, and looks almost like common Pitch. If you put a little of it upon burning Coals, it will quickly fill the Room with a most pleasant Odour; and its Fumes received into the Head will effectually cure the Vertigo, Megrims, and all Distempers of that kind. It is also of great use for the Dead-palsy, for all Wounds and Sores, Aches and Pains. There is a sort of Wood which intoxicates Fish, and that, saith the Author, is a sort of Providence that it grows plentifully here, because the People are hardly ingenious enough to use other Methods of Fishing. This is in the Country about the great River *Amazons*.

Amazons-River, said by some to be the greatest River in the World, runs fifteen or sixteen hundred Leagues, and dischargeth itself into the Ocean with such Force that a great way from the Sea you may drink fresh Water. Mr. *Harcourt* declares, that being thirty Leagues from Land, they drank as good as could come from a Spring. There is Gold and Silver found in the Country; and it was on the most westerly Branch of this River where Sir *Walter Raleigh* would have made a Settlement by the Consent of the Natives, but was prevented by the *Spaniards* and the Sickness of his Men; and this is a Part of *Guiana*.

But let us return to *Brazil*. There is the Herb *Tyroqui*, called the *Solar Plant*, from its particular Regard to the Sun. It is as it were dead in the Night, contracted and wither'd;

and

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but

but as soon as the Sun is up, it opens and revives, spreading out its Flowers, and dies again at Night, till the Sun gives it a new Resurrection. The Root of it destroys Worms in Men and other Animals, and is sovereign against the Boody-Flux. Here is the *Bombazine*, of which comes the Cotton so called. When the Fruit is ripe, there are certain black Grains, in Form and Size like a Bean, out of which they beat the Cotton. Here is abundance of white Coral.

There is the *Biaratara*, which is like a Ferret; he has neither Teeth nor Claws, nor any formidable Weapon, yet is able to defend himself and offend his Pursuer, that no other Beast is able to do better; and that is by his Stink, which is so foul and horrid, as to make both Dogs and Men sadly sick. He has a cunning way too, to avoid being discover'd: He makes a Hole in the Ground, to do his stinking Occasions, that these may not betray him; and when he is surprized, he scatters that fine Perfume abroad, and by poisoning the Huntsmen and the Dogs, puts an End to the Chase. *Harris.*

Here are Apes and Monkeys, which leap from Tree to Tree, with their Cubs hanging about their Necks, whilst they cannot go by themselves; and those little Animals cling as fast to the Neck of their Dams as a Bur to a Man's Coat. When they are able to go, but not strong enough to leap, the old ones lie cross, and make a kind of Bridge from Tree

to Tree, holding fast by one Tree with their fore Paws, and the other with the hinder, and so the little ones pass over their Backs.

There is a sort of *Crab-Fish* as large that a Man's Leg will go into his Mouth. They live most upon Cockles, and have a notable way to get the Fish out of the Shell; when they see a Cockle gaping, which they often do, they presently by their Claws slip a little Stone into the Aperture, so that the Cockle cannot close its Shell; and they pick out the Flesh with a great deal of Dexterity. There are *Wilks* two Spans in Length and one in Breadth, and as white as Ivory. There are Pearl-Oysters very large, so that many of them have a very large and rich Pearl. There is a prodigious Oyster-Shell among the Rarities of *Holland*, weighing 130 Pounds.

There is a *Water-Snake* of so strange a Quality, that whatsoever touches it sticks fast to it, and by that means it gets its Living. It is of a vast Length, but can contract itself wonderfully. So he comes ashore, lays himself down close, and whatsoever stumbles upon him is caught by his glewy Skin; then he whips away with it to the Sea, and returns to his natural Length, which is equal to a large Cable. There is another large *Water-Snake*, generally twenty-five or thirty Foot long, and a Yard in Compass. One of them was found dead twelve Yards and a half long, which had two wild Boars in his Belly. *Harris.*

Lerius travelled in *Brazil*, and tells an odd Story : Being at a certain Village, he was treated in a friendly manner; and one Night the *Brazilians* making merry upon the Death of a Captive, whom they made a Feast of as usual, *Lerius* had no Mind to go to such Sports; but one of them comes to his Apartment with a roasted Foot of a Man, 'offers it to him as a Dainty, which they had sent him a Taste of. This put him into a sad Fright, he thought it signified, that the like Cookery was to be perform'd upon himself: He was in a great Agony, and pray'd all Night : His Interpreter tells them what a Fright they had put his Master in, they came to see him, and broke out into an extravagant Fit of Laughter, so that *Lerius*, instead of being afraid, was ashamed that he had made them such Sport.

I have set down this Story, to shew that there are Man-eaters, because some will not believe it; but there are such in several other Places, yet very civil to Strangers. One may venture, says my Author, to rely upon the Credit of this Story, because *Lerius* tells it of himself, and it does not make much for his Advantage. Besides this, he had several Adventures among the *Brazilians*; all which, as he declares, gave ample Testimony of their Courtesy to Strangers; and makes it very certain that no Man need fear to go amongst them, provided he does not exasperate them by Injuries; but they certainly eat their Captives in War, of which *Lerius* gives a large Account. *Harris.*

Belia,

Belia, the chief City of *Brazil*, S. Lat. 13. has a considerable Trade: There is an amphibious Creature that lives on Land or in the River, called *Cachora de Agua* by the *Portuguese*, by the *English* the *Water-Dog*, because he resembles a shag Mastiff, having four short Legs. In the Country there is a Tree called *Winteranus Cortex*, whose Fruit has a hot Taste like Pepper, and is like white Pepper-corns; the Bark is a kind of universal Spice, for it has a Taste of all together; it is very comfortable to the Stomach, and by many preferr'd to any Spice whatsoever.

There is a kind of Pepper called *Quiyo*; it is used in Sauces, both in Substance and Infusion, in *America*, *Spain* and other Countries, and by many preferr'd before the best Pepper; it is a very good Stomack Medicine. There is a Shrub called by the *Brazilians*, *Nabugua-cu*, whose Fruit hath a Kernel, about the Size of a Horse Bean. Of this they make an Oil, which is used not only for Lamps, but it is good against all cold Distempers; six or seven of the Kernels are a strong Purge and Vomit, and the Leaves a Medicine for the Head-Ach. *Dr. Grew.*

There is a Fruit called *Anda*, the Stone whereof is a Wonder in Nature; one of them is kept in *Gresham College*; it is as big as a middling Bell-Pear, extraordinary thick and hard; so that it is impossible the Kernel within should have Air and Sap enough for its Growth, but that there are three great Holes

on Purpose, by which both are admitted; the Kernel is as big as a *Damascene* Plumb, one or two of which will purge and vomit. There is another Wonder in that small and tender Part of the Kernel which becomes the Root of the Plant; by this chiefly, the Sides of the Stone, those thick Walls, are made to cleave asunder, that it may descend into the Earth. *Dr. Grew.*

Penguins Island, so called from the Bird of that Name, there being abundance in that Island, whereby Sailors are relieved with Food; they harbour in Burrows under Ground which they make for themselves, and the Island is undermined by them, except one Valley which they reserve for feeding upon; for they feed upon Grass and Weeds like a Goose, which they resemble in Size, tho' they have no Feathers, but only a sort of Down all over the Body; it is pleasant hunting them; and being pursued they make to Sea with great Swiftneſs of Foot. It is on the Coast of *Brazil*, S. Lat. 46. *Harris.*

Here are Ducks of a different sort from ours, which have one Part of the Island to themselves, that is the highest Hill in it. The Art of their Nests is wonderful, and made of the self-same Mould, that all the Hill consists of, which they moisten with Water fetch'd in their Bills, till they make it a kind of Clay; then they make the Nest as regularly as if done by Mathematical Rules, being in the Form of a *Cylinder*, the Top and Bottom about a Foot over, and the Height 8 Inches: They are so exact

exact in the Building, that you cannot find any Nests that differ from one another in any of their Dimensions, and they are placed at the same Distance from, and near to, one another, and all round about and within kept clean. A wonderful Act of a wise Mind that gives such an Instinct to Creatures, which without Reason so much resemble it !

There are here abundance of *Seals* or *Sea-Wolves*, which differ from all others, having four Feet and Mustachoes, and are much larger ; these, as others in hot Countries, come a-shore and lie basking in the Sun. Some of Sir *Richard Hawkins's* Men spied a Company of them lying asleep with their Bellies up ; they thought to catch them napping and take some of them Prisoners ; but these Creatures always provide against a Surprise ; one stands Centinel whilst the others sleep, and gives Warning at the Approach of Danger. As soon as he saw the Men he wak'd the rest with a great Howl, and they all ran presently to Sea ; the Men got betwixt them and the Water with Clubs in their Hands, and thought to cut off their Retreat ; but the *Seals* ran against them with such Force, that they tumbled the Men down ; and though they dealt blows amongst them, yet could they not stop their Career. *Harris.*

Port-Desire is the next Harbour to the Straits of *Magellan*, S. Lat. 53. 20 M. *Knivet* was there some time, and says there are People very large that deserve the Name of Giants :
He

He saw some of the Prints of their Feet upon the Shore, above four times the Length of ordinary Men's Feet. He actually saw one of them that was taken and brought to *Brazil*, a meer Youth, but above 13 Spans long; he was fair and well proportioned to his Height, his Hair long and hanging down upon his Shoulders. This is the Country of the *Patagons*, of which there are other Accounts which testify of such a People in being.

Cape *Virgin Mary* is at the very Entrance of the Straits, and *Port Famine* almost half way within: There are Savages very different from the former, not above 5 or 6 Spans high, but withal thick and well-set; their Mouths are so wide, that they reach almost from Ear to Ear, and these wide Mouths they fill with raw bloody Flesh, which they devour with excessive Greediness; they are so shy and fearful of being catch'd, that there is no Converse to be had with them. Cape *Froward* in the Straits is the Southermost Land of the vast Continent of *America*.

At the Entrance of the Strait the Flood sets into it, and the Ebb out, and keeps its Course as on other Coasts, six Hours Flood and two Hours Ebb; it rises and falls near four Fathoms perpendicular: It is high Water here at the Change-day of the Moon at Eleven o'Clock. At *Whales Point*, near the End of the Strait, there is but an Hour's Time on both Tides, Ebb and Flood, when the Tide runs strong. The Tides are rather advantageous, to help
from

from Road to Road either Way. The whole length of the Straits of *Magellan*, with every Reach and Turning, is computed to be 116 Leagues. Sir *J. Narborough*, *Harris*, vol. 2. p. 108, &c.

Terra del Fuego is a large Island, which makes one side of the Strait; and there is another Strait, made by this and *Le Mair's-Isle*, which is called *Le Mair's-Strait*, of which *Cape Horn* is the utmost Point, S. Lat. 58. There is the small *Armadillo* or Hedge-hog, being something like that Creature, living in Holes like Conies; his Body is covered with a Shell, with Joints one under another, like Coats of Armour of extraordinary Strength; and no Dogs can hunt them. He gathers himself up, Head, Feet and Tail, within his Shell, as round as a Ball. He is Meat for a Feast; prefer'd before Conies or Sucking-Pigs. Dr. *Grew*.

There is the Pig-headed *Armadillo*, called by the *Brazilians Tatu*, as is the former; but this by the *Spaniards Tatu Porcinus*, and is somewhat larger, being ten Inches and a half, and some of them longer, from the Snout-end to the Tail. The Back-piece consists of ten Shell-plates, joined together by the Mediation of as many parallel Skins; every Plate is about half an Inch broad, curiously composed of small triangular Pieces, indented one against another, and pounced or pricked all along their Edges. His Shell next his Tail ends with an *Ellipsis* or oval Shape; the Fore-part of his Tail

Tail hath shelly Rings, the other half has Scales set together as on his Head. Dr. Grew.

The Writer of the Earl of Cumberland's Voyage saith, When they had passed the *Tropic* of *Cancer*, and had the Sun over their Heads, there was a noisome stinking Rain, which fell a long time together; it brought a Stench of Sulphur along with it, extremely offensive to the whole Fleet. The farther they went from the Sun, they had less of these ill-scented Rains; but it did no Harm, nor made any sick. And there seems to be a great Providence in it, by carrying off that Way a great Quantity of Sulphur, which would do Harm by Thunder and Lightning. Harris.

The Earl was sent upon an Expedition against the *Spaniards*. He assaulted and took the Town *Porto-Rico* Anno 1596, in the Island of the same Name, N. Lat. 18. one of the *Antilles*. Here excellent Lemons and Oranges grow without any Cost or Attendance. In the Rivers small Grains of Gold are mixed with the Sand. The Soil is rich, and maintains much Cattle. Their Cows are as big as our Oxen; so that Hides are their chief Commodity. There are two or three little Isles near the Mouth of the River *Toa*, where Pigeons are so plentiful that a Boat may go, in a Morning or Evening, and presently take ten or twelve dozen.

Here they make Bread of a Root called *Cassavy*. This Root is full of Juice, which must be pressed out. The *Cassavy* Bread is very white. But the finer Bread is made of *Maiz*,

a kind of *Indian* Wheat, somewhat different from another sort, not unlike Rice in Size and Taste. This also grows upon a knotted Stalk like a Reed, three Yards in height; and at the very Top the Grain shoots out. In this Island the *sensitive Plant* is very common; which, being touched, strangely shrinks and contracts itself. The *English* left the Place by reason of Sickness, *viz.* the Flux, which carried off 500 of their Men in a short time.

In their Way home they met with a prodigious Storm; which was preceded by a Calm no less wonderful, which continued thirteen Days, the Air being violently hot, and all the time of this Calm the Sea ran monstrously high; and during the whole Voyage they had not seen greater Seas, raised by a boisterous Wind, than now they saw without any Wind at all. They were then near the *Azores*, one of which is *St. Michael's*, where only the true *Meridian* is found. For the Compass had no Variation, either Easterly or Westerly, contrary to what is observed in other Places. *Harris.*

Guadalupa Island. Here Sir *Thomas Gates* touched in his Way to *Virginia*, *Anno Dom.* 1606. There they found a Spring so hot that it boiled a Piece of Pork in half an Hour. In the Island *Moneta* there is Plenty of Strawberries four times bigger, and as much better tasted, than ours in *England*. They came to main Land at *Cape Comfort*, and were kindly received by an *Indian* King. He led them to his
Town

Town *Rapatamia*. The Walk thither, through Woods and goodly Corn-Fields finely watered, was itself one of the finest Entertainments that could be desired. They built a Fort at Cape *Comfort*, and some Houses called *James-Town*, N. Lat. 45. *Harris*.

There are *Beavers* here, but not so common as further West and North; and are a good Branch of Trade. They are good Meat to the Savages, and as big as an ordinary Dog; but their Legs are very short; the two Fore-feet like a Dog's, and the hinder Feet like a Swan's, to facilitate their swimming, as was before observed. Among the Fish there are *Stingrays*, which carry a dangerous Sting in their Tails. Capt. *Smith* was stung by one of them. The Effect was a violent Swelling and a tormenting Pain, but was cured by a good Chirurgeon; and the sick Man, that was like to die in the Morning, was able to make a Supper of it in the Evening: For they are good Meat. *Harris*.

Antilles. By this Name formerly were called all those Islands between *Florida* and *South-America*; the North-part of them is now called *St. Lucaes*, the South-part *Caribby*, and the Middle *Antilles*. Of these there is a little Knot called *Virgin's Islands*; among them one named the *Bird-Island*, from the incredible Number of Birds found there. There needs no Snares, says the Author, nor other Artifices to take them; for a Man may catch with his Hands alone almost enough to serve a whole Fleet.

Fleet. There is a sort of Trees, whose Bark tastes like Cinnamon, and it is hot in the Mouth like it. *Harris.*

There is one of those Islands, lying between *Hispaniola* and *Jamaica*, named *Navazza*; near which is a wonderful Spring, which, altho' half a League from Land in the Sea about sixteen Foot Water, nevertheless rises up with so much Strength that they draw fresh Water out of it in the middle of the salt. At *La Croix*, another of those Islands, there is a peculiar sort of Tree called *Mamoa*, which bears excellent Fruit once a Month, and is shaped like a Woman's Pap. N. Lat. 18, 30. *Coll. Dict. De Laet. Hist. de Nove Munde, Atlas.*

Bonair Island, Lat. 12. a *Dutch* Plantation near *Barbadoes*; and from hence about forty Miles W. is *Curassaw*, another *Dutch* Island, which produces Sugar. *St. Eustace*, the chief of the *Dutch* Plantations, is subject to Earthquakes and Hurricanes, at the Approach of which the Birds fall flat to the Ground; and the Rain, that precedes them, is always bitter and salt; by which it appears that there is a Collection of strong Vapours, that arise both from Sea and Land, by a stronger Power of the Sun, and greater Rarefaction of the Air. These are part of the *Caribby* Islands; and near on the Continent is *Suranam*, a *Dutch* Plantation, from whence they have Sugar and Tobacco. *Atlas.*

On the *American* Continent, upon the Coast of *Guiana* and * *Norembega*, it is observed that

* The North Continent or great Peninsula of America, divided from the South by the Isthmus of Darien and the Gulph of Mexico.

that the Sea in many Places is so covered with green Weeds and small Berries, even where the Water is not to be fathomed, that it rather seems to be a Field of Grass than the Ocean, and much retards the Ships sailing. The same is on the Coast of *Africa*, between Cape *de Verde* and the River *Niger*; where it is said to be more strange, because there the Sea has no Bottom, which is to be understood that it is deeper than their Plumb-lines. It is not yet known, and thought very strange, how and from whence those Berries and Weeds should come. *Herbert, Mandelslo.*

Cony Island, so called from the Abundance of them found there; and they are larger than Cats. It is fourteen Leagues short of the Bay of *Soldania*. There is also Abundance of *Penguins* or white Birds, so called from their Colour. They are covered with Down instead of Feathers, and their Legs are of more Use to them than their Wings. They, of all other Birds, go the most exact in their Motion, their Wings hanging down like Sleeves. They use both Sea and Land, feeding on Fish and Grass. On the Coasts are great Numbers of *Seals*, which are somewhat like a Mastiff, and bark like the bellowing of Bulls. They come on Shore, and have such an Art of casting Stones behind them as endangers their Pursuers. *Herbert.*

To the Account of the *Bermudas* is to be added, that they have a Trade with *Virginia*, being 300 Leagues distant. A Colony came there

there with Capt. *Moor*; but a Ship had been there before, out of which a Troop of Rats landed, which multiplied so vastly that they were a kind of Plague, consuming all kind of Fruits. They swam the Sea to other Islands. The People had some Cats, which bred all they could; and they taught Dogs to hunt the Rats, and all would not do. But Providence provided. When the Rats had pretty much increased, there came a great Number of Ravens, which destroyed the Rats in four or five Years time, and then departed from these Islands. None of these Birds had been seen there before, nor have been observed there since. *Harris.*

Thunder and Lightning are terrible here; sometimes Rocks are split, and great Pieces tumbled into the Sea. It is particularly observed, that if a Circle is seen about the Moon, a prodigious Storm certainly follows. The same *Halo* is a Sign of Rain with us; but in those Parts the Circle is much larger, and in Proportion the Storm more violent. There is a kind of Spider, beautifully coloured; it looks as if it were adorned with Gold and Pearls. Here Tortoises abound, and are as large and good as any where. Upon the Rocks there grows a Fruit in Shape and Size like a *Catharine-Pear*, but full of Prickles all round; whence the *English* call it the *Prickle-Pear*. It is full of Juice, and tastes like the Mulberry. *Atlas.*

Guatimala in *New-Spain*, eight Leagues from the *South-Sea*, famous for four sorts of Dies, *Indigo*, *Otta*, *Cochineel* and *Silvester*. *Indigo* is made of a Stalk of an Herb, something like *Flax*, but more substantial. *Otta* is a red sort of Die, made of red Flowers growing on a Shrub seven or eight Foot high. The Leaves, as *Indigo*, are put in Water till they are dissolved; then they draw off the Water and make the Sediment into Rolls to be dried in the Sun. *Cochineel* is made of Insects bred in a Fruit like a Prickle-Pear; when the Fruit opens, Insects appear on the Inside, which, after a time, fall down dead upon a Cloth laid for the Purpose, and afford a precious Scarlet Die. *Silvester* is a red Grain or Seed growing on a Fruit, which being ripe opens, and the Seeds are shaken out with the least Touch; the Colour almost as fine as *Cochineel*.
Dr. Grew, Harris.

Florida stretches out into a Point, which is in N. Lat. 25. over-against the Island *Cuba*, and joins to *Georgia* about Lat. 32. There is a Creature named the *Sloath*, from his slow Motion. His fore Feet are almost double the Length of the hinder, and he has only three Claws on a Foot. He is three or four Days in going up and coming down a Tree, but can take a Rest by the Way; for whatever he catches he will hold the thing so stiffly, as to sleep whilst he hangs at it. His Voice is very remarkable; it is a musical Sound, which he repeats six times together, descending like
 Notes,

Notes, as if one should sing, *La, sol, fa, mi, re, ut*. He is also found in *Brazil*; and, upon the Account of his Musick, he is there called *Haij*. Dr. Grew.

Guiana. Captain *Leigh* undertook a Voyage to this Country, but without Success. The Sailors disagreed, and ten of them came to the River *Wiapoco*, where the coming of a Ship was foretold; which they themselves looked upon as very strange. The *Indians* told them some Months before, that there were three Ships in the River of the *Amazons*, one of which would certainly come into the River *Wiacopo*, where they then were, and in Distress for want of a Ship. Accordingly a *Dutch* Ship came, and brought them to *Holland*. They say that the *Indians* often converse with *Peyar*, an invisible Being, which they call by that Name, and that this Information came from him. But let it come how it will, says the Writer, it was certainly a true one; for the Ship came exactly at the limited time.

Here I shall add another Account of the *Land-Unicorn*, from *Marmol*. It is of an Ash Colour, and resembles a Colt of two Years old, excepting that it hath the Beard of a Goat, and in the Middle of his Forehead a Horn 3 Foot long, which is smooth and white, with yellow Streaks from Top to Bottom. This Horn is an Antidote against Poison; and it is reported that other Animals delay drinking till it has soak'd its Horn in the Water to purify it. It casts its Horn like a Stag, and Hunters find it in the

Deserts; but it is so nimble it can neither be killed nor taken. It is a Proof of the Reality that the Horn is very different from that of the Sea-Animal.

There is a very remarkable Account of the Isle of *St. Hellen*, S. Lat. 16. There were no Inhabitants upon it when discover'd by the *Europeans*; yet there was Plenty of Oranges and Citrons. Altho' it is mountainous, very steep and wither'd-like, yet on the Top there is a great deal of Moisture; and there is not a Gap or Valley without a Brook or Rivulet; the greatest of which is in a Vale about 1000 Paces long and 150 broad, at the End whereof there's a ragged Hill of Rocks, upon which there falls down a Stream of Water from a very high Mountain, insomuch that it is beat as small as Rain before it falls. *Mr. Beaulieu*. Now this being a small Island, in a very hot Climate, these great Fountains must needs proceed from the Sea.

St. Vincent Isle. There is Plenty of excellent Tortoises, which are called *Free-Tortoises*, and distinguished from others by the Smoothness, Plainness and green Colour of the Shell, the Largeness of their Body and the Smallness of their Head, and the Form of their Snout, which resembles the Teeth of a Saw. They commonly weigh three hundred Pounds, and eat as well as a young Heifer. They come out in the Night-time, and lay their Eggs upon the Sand, which they bury a Foot deep. Most of them have two hundred and fifty Eggs shell'd,

shell'd, and as many unshell'd, in their Belly. People watch their coming out, and take them by turning them upon their Backs with a Stake; after which they cannot turn themselves, and so lie there till Morning. *Ib.*

This Author saw two large Fishes with long Bills, which seem'd to be of that sort which are known to pierce into Ships. I could, says he, scarce have credited the Story of their penetrating through Ships, if the Governor of *Dieppe* had not shewed me a piece of the Beak or Horn of such a Fish, found in the Side of a *Dieppe*-Ship. It resembled the Tooth of a Sea-Horse, only it was straight all along, and of the Colour of Ivory; its Thickness was an Inch and a half Diameter; it had run five Inches into the Wood, and was broke off where the Lining join'd. One Captain had his Boat staved to Pieces by a Blow from one of these Fishes. I have often seen *Bonitoes* and *Albicores* wounded by this sort of Fish, and the Sea tinged with their Blood.

We saw a white thing floating upon the Water, which sunk when the Ship came within fifty or sixty Paces of it. It resembled a Man's Head without Hair; some said they saw a great many of them, and observed two black Eyes and a Mouth upon them. We also saw a strange sort of Fish about as long as an ordinary Lamprey, and equally round, with a large Fin or Crest above a Foot high over its Head, and slop'd in a continued Series down to its Tail. It swims upon one Side, so that the

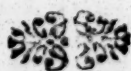
Fin, together with the Body, represents a large Fish of a triangular Form; and it makes its way by shifting from one Side to the other. But when it catches its Prey the Fin is straight, and appears above Water of an ashy Colour, tho' the Body is as white and as round as a Tallow-Candle. *Thevenot.*

There is a small Island a little way off from *Table-Bay*, and that is near the Cape of *Good-hope*. There are *Penguins* somewhat different from those of *Penguin Island*. They are Fowls without Wings, having two Fins and two broad Paws, upon which they walk upright; and with these they dig the Ground to make their Nests. They are a little bigger than a *Cormorant*, having a white Belly, a black Back, a very thick Head, and a Bill like a Raven's. In the Morning they repair to the Sea, where they swim and feed upon Fish, and at Night return to their Nests. They have an Oily Taste, and no Taste of Flesh; for my Part, I take them to be a *Feather'd Fish*. The other *Penguins* have no Feathers, but are cover'd with a woolly Substance. *Beaulieu.*

Islands of *Comori*, forty Leagues on this Side *Madagascar*. The Author, speaking of the Currents, saith, the Current sets here most certainly and constantly to the South-West. Now before the Full of the Moon it had such Power on the Ebb and Flood, that we never wonder'd at all; but at the Full-Moon and Spring-Tides we road upon the Flood against the Current, the Current running under, and
the

the Tide above, and the Ebb winding back with the Current. Whereas some wonder'd at the Alteration of the Current, he says it is no Wonder at all, being nothing else but the Influence of the Tide, which, being highed to sixteen Foot Water, is powerful enough to overcome the Current. Such is the Reason of the Sea being seen always to run into the Streights of *Gibraltar*, the Sea, being stronger, runs above the Current going out, although a vast Quantity of Water comes down from the *Mediterranean*.

Having doubled the Cape, they had a violent Storm, which they had Signs of the Night before. For at the Sun's setting reddish Rays ascended from the Sun, and underneath him was a Bank of the same Colour; and there appeared a Circle, from the Center of which there proceeded great Rays towards the Wind, being North-East. Under the Wind there appear'd a round blackish Cloud, and in the Middle of it we saw what the *Portuguese* call the *Ox-Eye*, which is generally taken notice of as the Forerunner of a great Storm; when the Moon came low, the Sea swell'd mightily, and the Storm was indeed very great, notwithstanding that the Air was so clear, that in the Night-time we saw the rising and setting of the Stars. *Beaulieu, Harris.*





An Extract from Monsieur Pirier, one of the Royal Academy of France, who published a Collection of Voyages in the Year 1708. This Author hath many of the same Passages which I have mentioned before; and here I give some further Account of the same Places, or the principal Remarks in other Places, and from some other Authors.

SIR Edmund Scory's Account of the Island Teneriff. Half Way up the Mountain may be gone with Asses and Mules; the rest is to be gone on Foot with great Labour. About the middle Way the cold Air is unsupportable; at the Top and Bottom it is very hot. When a Man is in the Middle, he must always keep on the South Side, and go up by Day; but when he comes near the Top, he must keep to the North Side, and go by Night. It never rains on the Top, because the Clouds are far below it, and for the same Reason the Wind never blows there: There is a Hole on the Top, where, if a great Stone is cast down, it sounds as if a mighty Weight fell upon many Brass Vessels. From the Top, the Light, before the Sun rises, is like a mighty Flame, and resembles that which comes out of a hot Oven;

Oven ; I suppose, because there is more watery Air between that Light and the Eye.

The Island of *Teneriff* produces excellent *Malmsey*, which is the only Wine that can be carried all the World over without being spoil'd. Here is a sort of *Pine*, which the Inhabitants call the *Immortal Tree*, because it never rots either above or under Ground, nor in the Water ; it is red and hard as the *Brazil* Wood. Here is another Tree of prodigious Bigness, which they call the *Dragon-Tree*, because the Bark is like Dragon's Scales. From it distils a clear red Gum, called *Dragon's Blood*, much better than that of *Goa*, or other Parts of the *East-Indies* ; the Leaves of it are about two Feet long, and like the Flags that grow in the Marshes, p. 46, 47.

This Author remarks upon Currents, as being Wonders in Nature, whereof the true Cause has not yet been found out, no more than the Flux and Reflux of the Sea ; which some attribute to the Sun, others to the Moon, and a third sort to subterranean Winds. Some think these Currents are occasioned by the Earth's being higher in some Places than others ; others think they are caused by great Rivers, and a great Quantity of Earth and Sand, which they drag along with them. One of the Ancients remark'd, that the Current, which is observ'd in the Streights of *Gibraltar*, proceeded from the Ocean's being less deep than the *Mediterranean* ; by which Means the Water ran from the higher Place into the lower.

Terra-

Terra-firma is the North Part of *South America*, which stretches out along the Sea Coast, from the *Atlantick* Ocean to the *Isthmus* of *Darien*. It was so named by the *Spaniards*, because the first main Land found, after the Discovery of the Islands by the famous *Columbus*. About the Middle is the Town of *Curraccas*, on the Gulph of *Cubagua*, N. Lat. 11. It is a large rich Town, and capital of its District, which produces the best *Cocoa*. It is in the Province of *St. Domingo*, bordering upon *New Andalusia* and *St. Martha*; from whence Westward is the Province of *New Carthagen*a, which joyns upon the Gulph of *Darien*. The Town *Carthagen*a is in a *Peninsula*, join'd to the Continent by a Causey of 250 Paces. Here the *Spanish* Galleons land Part of their Goods before they go to *Porto-Bello*.

In these Countries are found Gold, Emeralds, and excellent Balm. There is a certain Creature, which has been mentioned before, called by the *Spaniards*, ironically, the *Greyhound*, because of its Slowness. His Body is about two Feet long, his Legs very slender, with which he seems rather to creep than go. In going 50 Paces he will take up a whole Day; yet he is a kind of Musician, and pronounces six Notes distinctly, which he falls always by equal Proportions, sounding, *Ha, Ha, Ha, Ha, Ha, Ha*. He sings only in the Night, and after he has sung over his Notes, he lies still a while and then begins again: He can get into a Tree, and there he will stay 18 or
20 Days,

20 Days; and no Body could ever observe what he lives upon; probably his Trade may be catching of Flies.

Porto-Bello was so named by *Columbus*, because it is a good Harbour, which he seasonably discover'd, N. Lat. 11. Lon. 76. Here is a sort of Cats with thick Tails, on which they lay all their Strefs, when they design to leap from a higher Place, or from one Tree to another; they are so strong and fierce as to kill a Boar, to which they are bitter Enemies; they are tameable when taken, yet retain their Spite against a Boar, of which there was an Instance in a Ship, into which a Boar being brought, one of these Cats on board fell upon and kill'd him immediately. On the Banks are *Allegators*, which fly as soon as Men come near them; and as they go send forth a Scent far excelling that of Musk, p. 104.

Panama is on the *South-Sea* Coast, over-against *Porto-Bello* on the other Side, between which two Places the Neck of Land is not above 18 Leagues; and if the Road were straight without Windings, it would not exceed seven or eight. Goods are brought hither from *Mexico* and *Peru*, and carried by Land to *Porto-Bello*, after they have gone apart by the River *Chiagre*. There is an *Herb* call'd *Nequen*, which bears Leaves like unto a Thistle; of these the Natives make Ropes; they put them into Water, as we do Hemp or Flax, and then dry them in the Sun; these Ropes serve not only common Uses, but even to cut Iron, by pulling

ing them backward and forward like a Saw, which is easily done by throwing fine Sand upon the Place, where they design to cut. *Collier, Gage.*

There is a sort of Bird called *Alcatraz*, which hath a Beak two handfuls long. When the *South-Sea* flows on the Coast of *Panama*, which it does above two Leagues from low Water, it brings along with it a vast Quantity of Pilchards; these Birds no sooner see them, but they plunge into the Sea for them; and when the Sea retires they follow their Prey: But as they return, they are frequently met by another sort of Birds that attack them and force them to quit the Booty they have got, yet not without fighting for it; and the Combat is very diverting. Whilst they are thus busied, the Men take the Advantage, and knock them down with Poles; by which Means they take so many as to fill their Canoes with them: They are fat, and have an excellent Taste, and afford Oil for Lamps.

From *Terra-firma* in the Country, there are Spiders as large as Sparrows; and, upon opening them, you find their Bodies full of those Threads wherewith they make their Webs. There are great Numbers of Land-Crabs, without which Travellers wou'd oftentimes perish with Hunger; but it is thought they eat somewhat that is venomous, because sometime People die instantly that have fed on them. There is a sort of Trees which bear venomous Apples, of which the *Indians* compose the Poison where-

wherewith they poison their Arrows. When the *Europeans* see the Crabs near those Trees, they will not eat of them ; they lodge in Holes of the Ground ; and when they come out are easily taken, because they go very slowly.

On the Shores there is a sort of Monster named a *Lizard*, only from its Figure, but is a kind of Crocodile, with some Difference from others ; they are 14 or 15 Feet long, and as thick as a Man's thigh ; they have four short Legs, which raise them a Foot from the Ground ; they have exceeding hard Scales, which no Spear will penetrate ; and they are only to be wounded under their Bellies : They lay their Eggs in *December*, when the Rivers have done overflowing, and scrape a Hole on the Brink of the Water in the Sand, where they hide 3 or 400 Eggs, which the Sun hatches by Putrifaction, the Males and Females having no more to do with it ; these Eggs are eaten without Fear, and sold in the Market like Geese or Pullets Eggs. *Pirier 204, &c.*

The *West-Indies* produce many Birds quite different from those of other Countries ; and some of the same kind that differ in some respect ; there are Sparrows that sing melodiously, and are of several Colours ; some are black and very small Birds ; there are another kind of Sparrows which live in manner of a Family ; they joyn together to build a huge Nest, which will hold 200 or 300, that is, for several Families, with divers Partitions for each Family, and they unite their Forces against an Enemy.

Enemy. Most of other Birds are afraid to come near such a Nest, as we are afraid of a Nest of Wasps: If they espy a Bird of Prey coming near them, the whole Flock draw out in a Body, fall upon the common Enemy, and do not leave him till he has left some of his Feathers behind him.

In those Seas are *Sea Wolves*, which differ from others so called; they are 18 or 20 Feet long and eight in Circumference. They go out of the Water to sleep upon the Sand; and their sound Sleep makes them easy to be taken. You may hear them snoar at a great distance. The Females bring forth two young ones, and nourish them with Milk from their Breasts. They prey upon other Fish, who make War against them in Shoals, surround and bite them vigorously; but they make their Party good, let the odds of Number be ever so much. One thing is very remarkable concerning their Skins, that Pouches or Girdles, made of them, relax and lie flat when it is ebb-Tide at Sea; whereas they are stiff and bloated when the Waters flow, p. 286.

On the Sea-Coast there is a Bird of the amphibious kind, which hath the same Property with the *Osprey-Eagle*. One of his Feet is large and broad like a Goose, the other hath a Talon like an Eagle, and his Feathers are spotted like a Leopard. He is a Bird of Prey both by Sea and Land. If any Fish are sporting in the Water, he spies them at a distance, comes down quickly upon them, gripes them

with

with his Talon, and with the other Foot swims away. If he happens to light upon a stout Fish, he carries it to the next Rock or Tree, and there feeds upon him. For want of Fish he feeds upon Lizards at Land, such as are not too big for his Management, p. 287.

Alonso Suaz, going to *New-Spain*, having met with a Storm in the Gulph of *Mexico*, landed upon a small Island, where they were in great Want of fresh Water. The Captain's Boy, being no longer able to endure Thirst, and espying a *Sea-Wolf* (one of those before-mentioned) lying at length and suckling her Young-ones, came softly near her, and taking away one of her Whelps, put himself in its stead, and suck'd the Old-one's Teat; which, turning about, tore his Leg; but he was cured in a short time. They wanted not for Meat, there being a vast Number of small Birds; and the Shore was covered with their Eggs. These Birds being not in the least shy, they took as many as they pleased with their Hands, p. 330.

In *New-Spain*, alias *Old-Mexico*, there are two very high Mountains, constantly covered with Snow on the Top. From thence issue forth two thick Columns of Smoak, rising up straight in the Air; and tho' the Wind blows always hard there, it is not strong enough to move either, much less to disperse these Columns. Several Attempts have been made to get up to the Tops of these Mountains, to discover

cover the Cause of this Prodigy, but in vain; no body has been able hitherto to reach them, because the Wind blows Heaps of Ashes in your Face so as to stifle you; besides the Cold is unsupportable, tho' this Climate is otherwise exceeding hot. *New-Mexico*, more lately discovered, is farther North, called also *New-Granada*, Lat. 36. p. 341.

The Province of *New-Spain* is surrounded with Mountains, in the midst whereof is a Plain of sixty Leagues in Circumference, where there is a thing wonderful; two great Lakes, one of which is fresh, the other salt Water; both ebb and flow in such a manner that, when it is high Water in the salt Lake, it dischargeth itself into the fresh Lake like a rapid River; on the other hand, the fresh Lake disembogues, at certain times, into the salt-water Lake. In the latter there is a kind of Fish without Scales, having four Feet, and privy Parts much like a Woman's, as also the monthly Flowers; the *Spaniards* call them *Juguete de aqua*. The Saltness of the Lake proceeds from Abundance of *Nitre* that lies at the Bottom of it. *Pirier* 349, also *Collier*.

The City *Temistian* is the same with *Old-Mexico*, the Capital of *New-Spain*, N. Lat. 20. It was a fine City, large and well-built, when the *Spaniards* came there. It has four principal Streets, built on Arches, and is situate in an Island in the salt-water Lake, about two Leagues from Land. There is much Gold and other rich Commodities. There is Honey of
different

different kinds; one sort taken out of the Canes of *Maiz*, which is the *Indian* Wheat; another sort out of Sugar-Canes. They have also certain Trees, which furnish them with that sort of Honey of which they make their Wine or *Metbeglin*. They have also Bees Honey; and it may be said of them, that when the *Spaniards* came there they wanted nothing but the Knowledge of the true God, p. 350.

New-Mexico, or *New-Granada* is, with the other, comprehended under the Name of *New-Spain*; and the Capital hath the same Name. The whole Extent is reckoned 600 Leagues, from the River *Chagre* in the *Isthmus* of *Panama* or *Darien* to the 38th Deg. N. Lat. It is divided by high Mountains and Lakes from *Canada*, *Virginia* and *Florida*. They have an admirable Plant called *Mugney*, which furnishes small Wine, Vinegar, Honey, Needles, Thread, Stuffs and Timber. There is a miraculous Bird called *Cincon*, less than a *May-bug*, covered with wonderful Feathers. It feeds, as they say, on Dew and the Smell of Flowers. This is certain, that it fastneth itself to a Bough in *October*, and there sleeps all Winter. *Collier*, *Linschotten*.

Campeachy, or *St. Francisco*, a Town in the Peninsula of *Yucatan*, N. Lat. $19\frac{1}{2}$. Long. 92. It had 3000 Houses when taken by the *Spaniards*, and such Monuments of Art as proved the People to have been polite. From it the Bay is named, which is part of the Gulph of *Mexico*, till you come N. W. to *Vera-Cruz*,
D d N. Lat.

N. Lat. 19. Lon. 97. There is great Plenty of *Logwood*. On the other Side is the Bay of *Honduras*, at the Bottom of which is *Vera-Paz*. Here is a liquid Amber which drops from Trees. In many Places they have three Crops of *Maiz* in a Year; and two Crops of Grapes, the latter a little before *Christmas*. They have Reeds as large as Trees, which serve for Building. There is Abundance of Cotton-Wool called *Vigoion*. *Truxillo* is a fine Town, N. Lat. 16. These Places are part of *New-Spain*. *Atlas*, *Collier*.

The Islands of *Jamaica*, *Hispaniola* and *Cuba*, are near one another. There are several spontaneous Fruits; Vines growing in the Woods, whose Grapes are finer than those of *Europe*; Figs as large as Melons, covered with a Down like that of *Quinces*; Pear-trees very large, having Leaves like Laurels, but greener; the Fruit sometimes weighs a Pound, the Kernels resemble blanch'd Almonds, and are very bitter, inclosed in a very loose Film, between which and the first Skin there is a Liquor of surprizing fine Taste and Flavour. All these fine Fruits Nature presents them with, and they thrive without any Cultivation. Here are great Numbers of *Manchinella's*, shaped like *Craw-fish*. *Atlas*.

Jamaica is about thirty Leagues distant from *Hispaniola*, from which it bears West. *Pirier* says it is bigger than *Sicily*, but that is a Mistake. It is sixty Miles broad and 120 long. He mentions a River, whose Water is so hot that

that there is no holding a Man's Hands in it without scalding them. There are *Cocoa-nuts* full of Water, which is a pleasant Drink. There are Snakes and Serpents, which are good to eat, and exceed the best Pheasants and Partridges in *Europe*; but the Delicacy of them depends chiefly on the manner of dressing. There is a sort of Wood used in boiling them, which is odoriferous and never smoaks; and a Liquor is drawn from them which is very thick and delicious. The Tide here never rises above a Foot.

Jamaica abounds with Parrots and Paroquets. There is a kind of *Allegator* in the Rivers, which preys upon Beasts and Birds when they come to drink. He stretches himself upon the Shore, and resembles a Piece of dry Wood, as it were in Policy lying still, by which Posture he more easily takes his Prey. The Tobacco here is excellent, but some sorts flash in the smoaking, *viz.* such as grow in Saltpetre Ground, of which there is much in this Island; and that sort of Tobacco rots in Transportation. It is remarkable that this Island is not in the least subject to the violent Storms and Hurricanes, wherewith the *Caribbees* and other neighbouring Places are pester'd, one of which is *Barbadoes*, the Windward-most Island of all the *Caribbees*. *Pirier, Collier.*

Tobago, Lat. 11. Long. 58. It formerly was possessed by the *Dutch*, now belongs to *England*, and had its Name from the vast Quantity of Tobacco growing in it; besides it hath

many other valuable Commodities, as Indico, Balm, Balsam, Tar, Silk-grafs, &c. There is a perpetual Spring, and the Air tempered with gentle Breezes. Here are many wild Beasts, and several tame. Here is the *Aposta*, a Creature so in love with Men that it follows and delights to gaze on them. Here is the Bird called *Bill-bird*, because its Bill is as big as its whole Body. It is ninety Miles South of *Barbadoes*. *Atlas*, *Collier*.

St. Christopher's belongs to *England*, Lat. $17\frac{1}{2}$. Long. 61. Here the Mountains are of a sulphureous Composition. It hath two sorts of Pepper, one reckoned better than that of the *East-Indies*; and two sorts of Cotton, one as good for Beds as Down; *Obaxberries* of the Size of a Musquet-Bullet, that wash as well as Soap; large Mustard-trees, which bear no Seed, but their Leaves make good Mustard. *Antego*, sixty Miles N. E. of *St. Christopher's*, produces good *Muscovado* Sugar. *Barbuda*, twelve Miles off, Lat. 18. Here are very large Serpents, which destroy Rats, and are not poisonous. Here are several kinds of rare Wood, as *Brazil*, *Ebony*, *Cassia*, *Cinnamon*, &c. *Anguilla*, Lat. 19. Long. 59. is the most Northerly of the *Caribbee* Islands, possessed by the *English*. It produces Tobacco, and hath good Pasture-Ground. *Atlas*.

Cuba. Here are Partridges very small, but much exceed those of *Europe* in Flavour; they are easily taken, and may be made tame in four Days. What is greatly to be wondred at, there are

are in this Island a sort of natural Bullets, of very hard smooth Stone, and of divers Sizes, fit for all Bores of Muskets or Cannons; and by digging a little you have as many as you please. There is a sort of *Bitumen*, or such like Liqueur, which rould down from a Mountain, and is very proper, instead of Tar, for Ships. 2. *Curtius* speaks of such like *Bitumen*, which abounds in a very large Cave, and was found by *Alexander*; it is thought that the Walls of *Babylon* were cemented with it. *Cuba* is about eighty Miles distant from *Hispaniola*.

Hispaniola. Here is a very deep Cavern, into which Rivers fall with a horrible Noise. These Rivers form a great Lake, in which there are violent Whirlpools. What seems most wonderful, there is a Lake full of Fish on the Top of a Mountain, which is almost inaccessible on all Sides. In the Province of *Bainoa* there is a Lake above thirty Miles long, and fifteen broad; many Rivers run into this Lake, yet none have observed that any run out; whence it is thought there are deep Caverns which receive those Waters, and give them a Passage at a great Distance into the Sea. The Water of this Lake is very bitter; and there are other Lakes, some bitter, some salt, some fresh.

Of this Island Mr. *Collier* remarks, that the Dogs do not bark, yet are good at hunting. *M. Pirier* speaks of the *West-Indies* in general. It is remarkable that the *Indian* Dogs never

bark, nor howl, nor cry, nay even when they are beaten or kill'd. *Pliny* tells us, that the Frogs in *Cyrene* make no Noise; but when they are transported into other Countries they begin to sing. It is certain that the Grasshoppers, in the Isle of *Seriphe*, do not sing till they are transported into other Countries. It is possible that if the *Indian* Dogs were brought into other Parts, they would bark and howl like other Dogs, p. 283. I suppose some of our Dogs are carried into *America*, and would be inform'd whether they lose their Property of Barking.

Cabagua-Island, N. Lat. 10, 30. near the Coast of *Caracca* in *Terra-Firma*. It is a *Dutch* Settlement, and is remarkable for having no Spring of Fresh-water; they fetch Water from other Islands; but there is a Spring of an extraordinary Nature, which sends forth a Liquor like Oil; and it runs into the Sea without mixing with the Salt-water. The Island is barren, but is valuable for the Pearl-fishing. The Shore is cover'd with Pearl-Oysters, which bring forth the Pearls like Eggs. The Pearl is at first as fluid as a Drop of Milk, and so small as scarce to be discern'd; but grows like a living Creature, and hardens by Degrees. It is near the Island *St. Eustace*, which also hath no fresh Water; and they are forced to preserve Rain in Cisterns, altho' there is a Mountain in the Middle of the Island, p. 314. and *Atlas*.

Nevis

Nevis or *Mavis*, N. Lat. 17. It is about six Leagues round. Here is a pretty little Bird called the *Fly-Catcher*, of various and charming Colours. They come boldly into Houses, and clear the Rooms in a Trice from all Flies and Vermin; and it is very diverting to see their Motions. They put their Heads into as many Postures as they see the Flies shift Places. They have four Legs, and stand on the fore Feet, with their Mouths half open; and when they see an Advantage, leap directly on their Prey, and seldom miss it. They are so tame that they come upon the Table where People are eating, and catch the Flies upon it or upon the Peoples Hands and Clothes. They lay Eggs as small as Pease, which they cover with Earth, and leave to be hatch'd by the Sun, and, like the *Chamæleon*, assume the Colour of those things on which they stand or lie.

Atlas.

The Island of *Navaza* is in N. Lat. 18. betwixt *Hispaniola* and *Jamaica*. About half a League from the Shore of this Isle there is a remarkable Spring, which arises in the Sea; and the Water of it is fresh. There are certain Rocks which you may plainly discover under Water; from thence the Spring issues out above the Sea Waves in such a manner, that you may plainly distinguish the sweet Water of the Spring, without any Mixture of the Sea-water. The Spout is of the Thickness of a Man's Arm, and arises out of the Rock lying under the Salt-water at least five Foot deep from its

Top to the Surface of the Sea; which is sixteen Foot deep round the Rock. *Collier and Pierier*, p. 272.

The *West-Indies* have a Fruit called *Jajama*, the finest in the World; and its Beauty is not to be expressed, having more Variety of Colours than the Peacock's Tail. It is cut in Slices like Melons, but the Pulp is more juicy. It casts so agreeable and strong a Smell that one of them is enough to perfume a large Apartment. The Rind resembles the Scales of a Fish raised, and lying close one upon another. The Stem is straight and round, and produces only one single Fruit; yet they grow in such Plenty that they are very cheap. In some Places they make Wine of the Fruit, which is very sweet, but not so good as Grape-wine; its chief Excellency is in the Beauty of its Outside. The Trees in the *Indies* are always green, and never cast their Leaves, p. 274.

There are Trees, from which they make excellent Balsam. There is one sort called *Goacovax*, the Wood whereof burns like a Flambeau, and has an agreeable Scent. They produce a Liquor, which is improperly call'd Balsam, but has the same Effects. They take the Shavings of this Tree, and boil them in Water, whence comes a Liquor like Oil; but somewhat thicker, and red like Claret. It is an excellent Remedy for all fresh Wounds, stops the Blood in a Moment, and closes the Orifice. There is not a more easy nor safer Remedy in the World, and which allays the
Pain

Pain as soon as this does. Vast Numbers of these Trees grow in the Continent and in *Hispaniola*, p. 280.

There is also a Plant, which rises up to the Height of a Man, and affords an excellent Balsam. It bears a Fruit like a Grape, but as big as a Man's Hand. These Grapes they boil with the Leaves till it is the Thickness of Honey; and it cures a Wound speedily. A *Negro*, who had his Leg torn by a Cart, which run over it, was cured in a very short time; they only dipped Linnen Clothes in the Liquor, which they applied to his Leg. The Leaves of this Plant distill'd through a Limbeck afford a most excellent *Aqua Vitæ*, which cures a Wound presently. It is also an excellent Remedy for the Cholick and the Defluxion of cold Humours, p. 283.

The *Indies* produce a Creature which hath brighter Eyes than the greatest Beauty of Mankind. It is a Fly as big as a Man's Thumb; its Eyes give a Light like two lighted Candles, and have been taken for such in a Person's Hand. You may see to write by them, or walk in the darkest Night; and neither Wind nor Rain can extinguish them. They serve instead of Candles at Supper, without any other Light; yet they are in the low Class of Insects, which are so called, because they live without Blood and Respiration; and a Part being cut off, it keeps Life and Motion longer than the Limbs of other Animals, p. 290.

But

But there are other Insects more common, which are as wonderful for the Smalness of their Eyes and the Greatness of their Numbers. They are those very small Flies whose whole Body is hardly to be seen but in the bright Sunshine, when they suddenly appear in vast Numbers, and disappear with the Sun. *Pliny* cannot sufficiently admire the Perfections that are in such minute Bodies; and it is incomprehensible how Life resides in them. The Power of the Creator, and the Nicety of Contrivance, is greater in these small Animals than in large Bodies, or in any work of Man; the smaller the Work it is the more fine and curious. But there is vastly more Wonder in the invisible Spirit of Man, the Spirit of Knowledge. The Frame of Brutes is admirable: *But there is a Spirit in Man, and the Inspiration of the Almighty giveth him Understanding, Job 32. 8.*





An Account of the Nature of the Earth, which is mostly an Extract from Dr. Woodward, R. S. F. who publish'd his Book An. Dom. 1702, viz.

THE Natural History of the Earth, which is short upon such a Subject, but contains many ingenious Observations. The Author travelled over *England* on purpose to view the several kinds of Earth, Metals, Mines, Minerals, Quarries, &c. and takes in other Remarks. His main Design is to prove the *Universal Deluge*, and that chiefly by the Remains of Sea-Animals, which are found all over the Earth, and in the Bowels of it. He condemns that Opinion, which accounts them so created, and calls them *Lusus Naturæ*. There can be no rational Account, but that there must have been a general *Deluge*; and such a Cause would naturally produce such an Effect, which alone proves that great Event.

He shews, from probable Reasons, that God not only caused the Waters of an *Abyss* and Rain from above to join together to overflow the Earth; but by a farther Act of Almighty Power did even break up and dissolve the Parts of the Globe, and in a manner made another
Chaos,

Chaos, to form it again after another Model, to make it fit for corrupted *Man*. The Nature of *Man* being changed, the Earth too must suffer a Change, to make it more fit for its Inhabitants, and give it a Constitution more nearly accommodated to *Man's* Frailty. This was done in part by the first *Curse*, but totally effected by the *Deluge*.

There was a mighty Revolution, attended with Accidents very strange and amazing; an elegant Work quite unhinged, taken all to pieces, and turn'd into a Heap of Ruins; Convulsions so exorbitant, a Change so violent that the Representation is enough to terrify. By this means the Irregularities and Inequalities of the Globe were caused, the Rocks crack'd and broken, the Earth and Clay dissolved, so as to receive into them whatsoever the overflowing Water brought and casually scatter'd about. There was a general Confusion, and the whole terraqueous Globe was, at the time of the *Deluge*, put into that Condition which we now behold, p. 70. 80.

But though the whole Series of this extraordinary Turn may seem at the first View to exhibit nothing but Tumult and Disorder; tho' it may carry some Appearance that it was managed blindly and at random; yet if we draw somewhat nearer and take a closer Prospect of it; if we look into its retired Movements and secret Springs, we may there trace out a steady Hand, producing Good out of Evil, acting with the most exquisite Wisdom
and

and Contrivance, to restore Order and Beauty out of the highest Confusion and Deformity; yet in such a Measure only as was suited to the present Condition and Necessity of Mankind, 82.

The Earth before was by far too good for sinful Man, and the Goodness of God hath left it still too good; yet so as in part to tie up Man's Hands, and shorten his Power of sinning. This Change was not wrought by altering the Form of the Earth, or its Position in respect of the Sun, as was surmized by a very learned Man; * but by dissolving it, and reducing its Matter to the first constituent Principles, by mingling the vegetative with mineral Matter, and retrenching a considerable Quantity of the Vegetable, by burying it in some Depth, leaving so much near the Surface as might satisfy the Wants of human Nature, and that requiring Labour to excite it.

Dr. Bar-
net's The-
ory of the
Earth.

It is probable that, at the first Creation, the several sorts of Matter were laid regular, into equal *Strata* or Layers; that these *Strata*, whether of Stone, Chalk, Coal; Clay or Earth, lying thus upon each other, were all originally parallel; but by the *Deluge* they were broken on all Sides of the Globe, and their Situation varied, some elevated and others depressed. Whence proceed those Hitches in the Coal Mines, the *Strata* or Layers being broken, and the several Parts some higher some lower. The natural Grotto's in Rocks are the Breaches of the *Strata*, and from the same Cause the Vales are

are deeper, and Mountains higher than they were before.

There is a mighty Collection of Water inclosed in the Bowels of the Earth, constituting a huge Orb in the central Parts of it; upon the Surface of which Orb of Water the terrestrial *Strata* are expanded; and that is the same which *Moses* calls the *Great Deep* or *Abyss*. The Water of this Orb communicates with the Ocean, by means of certain *Hiatus's*, or Chafms, passing betwixt it and the Bottom of the Ocean. Thither the huge Whirlpools descend, and sinking Rivers find Passage; and tho' this Orb is for the most cover'd by the *Strata*, yet wheresoever those *Strata* are broken, or so porose that Water can pass, there the Water of the said Orb does ascend; which, by the Assistance of the Ocean, produces Springs, and a constant Circulation of Waters.

Altho' Rains augment Springs and Rivers, yet neither the one nor the other derive their Water, which ordinarily they refund, from Rains, as many learned Men have believed; nor from Vapours raised out of the Sea by the Sun, born thence by Winds into Mountains, and there condensed, as a Modern ingenious Author is of Opinion. But the above-mentioned *Abyss*, the great subterranean Magazine, with its Partner the Ocean, is the certain Fund and Promptuary which supplies Water to the Surface of the Earth, as well Springs and Rivers, as Vapours and Rain, by the Assistance of subterraneous Heat.

There

There is a nearly uniform and constant Fire or Heat, which is perceived in the Bottom of deeper Mines; this Heat is dispersed throughout the Body of the Earth, especially the lower Parts of it; which hath great Uses and strange Effects. Fire and Heat differ only in Degree, Heat is Fire in less Quantity. Fire is a Fluid consisting of Parts extremely small and light, and consequently very subtle, active and susceptible of Motion. An aggregate Body of these Parts in such Number, and closer Union, as to be visible to the Eye, is what we call Fire and Flame; a less, thinner and more dispersed Collection is Heat and Warmth. The Bottoms of deep Mines are found to be sultry, and the Stone and Ores there are sensibly hot in cold Seasons.

The subterraneous Heat evaporates and elevates the Water of the *Abyss*, buoying it up towards all Parts of the Surface of the Earth; it passes thro' the Fissures and Intervals of the *Strata*, and in less Degree thro' the Bodies of the *Strata*, yea even thro' Stone and the most firm Marble; for there is always a Moisture and Dampness in the Beds of Stone, which is the Reason that it is softer and cuts more easy, when first taken out of its Bed or Quarry than afterwards, when it has lain some time exposed to the Air, and that Moisture is evaporated.

The Water elevated at first is mostly a thin Vapour, but being collected by the *Strata*, is condensed into a thicker Body, in like manner as by an *Alembick*. If those *Strata* be raised
above

above the Level of the Earth, as those are in Mountains and high Grounds, then the Water being got above the said Level, according to the Passage it finds, flows out of Intervals or Apertures, and forms Brooks or Rivers: But where the *Strata*, which so condense it, are not higher than the main Surface of the Earth, it stagnates at the Apertures, and only forms standing Springs, Ponds or Marshes.

When the Heat in the exterior Parts of the Earth, and in the ambient Air is as intense as that below, that Water, which passeth the *Strata*, mounting up in separate Parcels, or in the Form of Vapour, does not stop at the Surface; because the Heat there is equal both in Quantity and Power to that underneath, which brought it out of the *Abyss*. This Heat therefore takes it here and bears it up, Part of it immediately out of the Surface of the Earth, the rest thro' the Tubes and Vessels of Herbs, Shrubs and Trees, and along with it a vegetable terrestrial Matter, which it detaches from the uppermost *Stratum* wherein these are planted.

This Water, as it slowly passes thro' the Vegetables, is their Nourishment, and then issuing out of the Tops of them, marches still on, and is elevated to such a Height into the Atmosphere, that the Heat being there less, it becomes there condensed, unites into small Drops, and at length falls down again in Rain, Dew, Hail or Snow; as does likewise the other Part of the watery Vapour that ascended in the
open

open Air, and did not thus pass thro' Vegetables; but when they so combine as to become very thick Clouds, the Sun's Heat is detained by their Thickness, and sets on Fire the sulphureous Particles, which become Lightning and Thunder: Whilst the Sun's Heat is stop'd by the thick Clouds, the Air is extreme cold underneath, and often formeth large Hailstones.

When the Heat in the exterior Parts of the Earth, and in the ambient Air, is less than that in the interior, the Evaporations are likewise less, and thereupon the Springs not only cease to be diminished, but are much augmented, as it happens mostly in Winter, even when there is little Rain; because a great Part of the Water, which ascends to the Surface in Vapour, stops there for want of Heat to mount it up, and fills the superficial *Strata* with Water, which by Degrees drains into Wells, Springs and Rivers; whence they abound more in colder Seasons than in hotter, when there is no Rain; and sometimes Water breaks out on a sudden, at the Approach of bad Weather, where there is a more free Passage under Ground. *Cambden* 749.

The Water which is thus dispensed to the Earth and the Atmosphere by the Ocean and lower *Abyss*, being carried down into the Ocean, which communicates and stands at *Æquilibrium* with the *Abyss*, is by that Means restored back to those Conservatories; whence it returns again, in continual Circulation, to the

Surface of the Earth, in Vapours and Springs. We may then observe that this Affair was not transacted casually and at random, but with due Conduct. The Quantity of Matter consolidated, the Number, Capacity and Distances of the Fissures or Passages, the Situation and Number of Hills, for condensing and discharging the Water, were so ordered as to conduce to the Ends whereunto they were ordained, in due *Number, Weight and Measure.*

There is an admirable Contrivance, that the Water does not disturb the Metallick or Mineral Matter, which lies in the *Strata* in great Plenty, but assists such as need its Help to collect it; for the Water, which ascends out of the *Abyss*, pervading the Pores of the *Strata*, that is, the Interstices of the Sand, the Crevices of Stone or other Matter, brings along with it all such Metallick, Mineral or other small Bodies, which lie loose in its Way, forcing them along with it, into the larger and perpendicular Intervals, to which it naturally directs its Course, as finding there a ready discharge; and thereby the Minerals are increased, which had been before formed. *The like Matter adheres to its like.*

The *Bitumen*, which is found in Lumps in some Springs, and in others in Form of an Oil upon the Surface of the Water, which by the Naturalists is called *Naphtha*, the Salt of salt Springs, the Vitriol, Alom, Nitre, Sulphur, Spar and other Minerals, with which the *Acidulæ* or Medicinal Springs are saturated, I say,
all

all these Minerals were lodged in the *Strata* of Stone, Coal, Earth, &c. and were educed thence and conveyed into those Springs by the Water pervading those *Strata*, in its Passage from the *Abyss* towards the said Springs. This Matter is thus carried up in greater or less Plenty, or to greater or less Height, according to the less or greater Quantity of *Heat*.

This subterraneous *Heat* or Fire, which elevated the Water out of the *Abyss*, being in any Part of the Earth stopp'd, and so diverted from its ordinary Course, by some accidental Glut or Obstruction in the Pores, thro' which it us'd to ascend to the Surface, and being by that Means assembled in greater Quantity into one Place, it causes a great Rarefaction and Swelling of the Water of the *Abyss*, putting it into very great Commotions, like unto an Obstruction in Animals; and at the same time making an Effort upon the Earth, which is expanded upon the Face of the *Abyss*, it occasions that Concussion which we call an *Earthquake*.

Wherever there happen to be any extraordinary Discharges of Heat, and that meeting with sulphureous Matter, according to the Quantity, there are *Vulcano's* or less Spiracles, Baths or hot Springs. The Mineral Matter, hurried along with these Discharges, into hollow Places, makes natural Stoves or sweating Vaults. Where Baths are cover'd, the Heat affixes some of the Mineral Matter to the Sides and Arches of the Building; where they are

not covered, so that the Mineral Water is not stopped and hindered in its Ascent, a great Part of it advances directly to the *Atmosphere*.

There is a Vapour raised less or more in every Place; and when this Vapour carries along with it any Mineral Steams, it then blasts Vegetables, especially those which are young and tender; blights Corn and Fruits, and is sometimes injurious to Men who chance to be abroad in the Fields. This happens more under the Surface, where the Heat is greater, and more Mineral Matter at Hand. The Exhalation, floating to and again, emits a sulphureous Smell, causes the *Mephitis* or Damp in Wells, Candles to burn with a blue Flame, sometimes extinguisheth them, makes Workmen faint, and, when very great, suffocates and kills them.

There is much Sulphur in Coal-Mines, which, having not Air enough to disperse it, will take Fire at a Candle very suddenly, and ascend the Pit with great Force, give a Crack like the Discharge of a Gun, kill or scorch the Miners, drive up from the Bottom whatever is in the Way, sometimes striking off the Timber, and mounting all up into the Air. This being succeeded by Smoak, resembles fired Gunpowder; and, as appears from these *Phænomena* of it, is nothing but an Exhalation of Nitre and Sulphur, which are the principal Ingredients of Gunpowder. This Effect I have known in the North about thirty Years ago; when sixty Men and Boys were killed at

one Blast; and a Piece of Timber, which was blown up to a great Height, by the Fall sunk deep into the Ground, and still remains a Memorial of that sad *Accident*.

At such time as the Sun's Power is so great as to penetrate the exterior Parts of the Earth, to disturb those Mineral Particles, and raise them out of the *Strata* wherein they lay; it does not only sustain them in Grotto's, Mines and other Caverns under Ground; but likewise bears them out through the Mouths of those Caverns, and through the Cracks and Pores of the Earth, mounting them up with the watery Exhalations into the *Atmosphere*, especially Sulphur and Nitre, and other more light and active Minerals; where they form *Meteors*, and are particularly the Cause of Thunder and Lightning. This is more peculiar to hot Countries, where the Thunder as much exceeds that of the North as the Heat there exceeds that of those Countries.

Man is a little World; and there is in his *Body* something like to the greater World, as Heat and a fluid Matter. The Fluid is raised by the *Heat*, and expired forth along with the Air; it goes off with it in insensible Parcels in the Summer Season, when the ambient Air contains *Heat* enough to bear it quickly away and to disperse it. But in the Winter, when the *Heat* is less without, it becomes so far condensed as to be visible, flowing out of the Mouth in Form of a Fume or grosser Vapour; and may, by proper Vessels set in strong freez-

ing Mixture, the better to condense this Vapour, be collected in a considerable Quantity.

This Author employs the latter part of his Book to vindicate *Moses's* Account against Dr. *Burnet's* Theory of the Earth, where he is not agreeable to *Moses*. It cannot well be epitomiz'd; but I shall only observe that he saith, That the Forms of Animals, and other Bodies belonging to the Sea, being found in great Plenty on the Land, is not only a Testimony of an universal *Deluge*, but that the World is much the same, in its general Form of Sea and Land, as it was before the *Deluge*; only the Ground is less fruitful, and hath some broken Parts: That the Remains of it are preserved in Stone, Shells, &c. which have a Tincture of Salt, as has been proved by Chymical Experiments. There are such Tokens of a *Deluge*, as will be a Monument of that extraordinary Accident quite down to the end of the World.

It is very remarkable that many Plants are buried under Ground, which shew the time of the Year when the *Deluge* happened. The whole Terror of the Bodies preserved clearly point forth the Month of *May*. I have not, says he, ever met with so much as one single Plant, or other Body, amongst all those vast Multitudes, which I have carefully viewed, that is peculiar to any other Season of the Year, or any thing that falls out earlier or later, any of them short or further advanced in Growth or Seed than they now usually are in that Month; which assuredly could never have happened,

pened, had there really been such an Equality of Seasons, and constant Temperature of Heat, as is imagined by the *Theorist*.

I shall add some Observations. Flint-Stones abound in *Suffolk*, scattered all over the Fields in vast Variety of Shapes and Sizes. They are covered with a brownish Coat; some nearer to a white Colour. One Piece hath several Knobs rounded; some have a Hole thorow, yet that is covered with a Skin; some have Pieces broken off, like unto a Limb cut off from the Body, and such are found at several Depths of the Earth, some in the Bottom of Wells. I imagine they have been so broke by the *Deluge*, being dashed one against another, and then laid in several Places, as the Earth yielded to the Force of the Water, and their natural Gravity disposed them.

In the East-part of *Suffolk* there are vast Quantities of *Shells*, which probably have come from the Sea, because the same sorts are cast upon the Shore. These are found near *Aldborough*, along the Sea-Coast, and ten or twelve Miles within Land. They lie in the Ground like Beds of Sand cast up at some distance from one another. As in other Places People have Marl, Chalk, Lime-stone-Crags, &c. so here they have Crags of Shell and Shell-pits. The whole Matter is Shells; but some of them are dissolved and knotted into Lumps, like Earth of a reddish Colour, consisting of small broken Pieces; some are half broken or more, of divers Shapes, Sizes, Colours; some are plain,

some streaked or wreathed, some channel'd like Cockles. They make good Manure; and this Use has not been known but within these forty Years.

There is Abundance of other *Shells* cast upon the Shores, of divers kinds; some useful in Medicines; others of no known Use, but remarkable for their Prettiness; some are peculiar to one Place, and some to another. There are several sorts that are called *Venus-Shells*, and have Lips of several Forms; some have smooth and even Lips, which are used for Ornaments; with these the *French* adorn their Horses Bridles and other Parts of Equipage; of these, and Jet mixed together, they also make Bracelets and other Ornaments for Widows in Half-mourning. Many are * striated, that is, having Channels or Furrows; such as are found near *Hartlepool* in the County of *Durham*, where the People call them *Nuns*. Dr. Grew, p. 138.

* The *Lat. Strio* signifies to make Rabbats or Channels in Timber, *Striant* bowes, the Oxen make Balks.

It is worthy to be noted out of this Author, tho' it be somewhat out of Course, that there is a sort of large Cockle that is called the *black gaping Cockle*, which hath the same *Epiphyfis* as the *long gaping Cockle*, by which the Shells are tied together; to this some of the muscular Parts of the Animal are fastned, to restrain the Shell from opening too much. This sort, when the South Wind blows, rise up to the Top of the Water; and setting their two Shells wide open, the one under them as a Boat, the other on one side as a Sail, they scour along.
The

The long gaping Cockle hath not the same Property, tho' somewhat larger; its length making too much Sail, which would overset the Vessel. Out of *Bellonius*, quoted by Dr. *Grew*.

To return to our Subject. We have good Reason to believe that there is Heat in the Bowels of the Earth, as many learned Men believe, together with this our Author; and that was one of the Causes of the general *Deluge*, being then augmented to a greater Degree for the effecting of so great a Change. This seems to be confirmed in *Genesis*, c. 7. v. 11. *The same Day were all the Fountains of the great Deep broken up, and the Windows (Flood-gates) of Heaven were opened.* The subterraneous Fire, more abundantly raised, broke open the Passages, and made Way for the Waters beneath to join the Ocean, and spread them over the Earth with Rain from above. But there was a miraculous Work, and a mighty Hand to guide every inferior Cause, as *God made a Wind to pass over the Earth, and the Waters asswaged*, Gen. 8. 1.

The Scripture-Account needs no Confirmation; yet there are other Accounts, which, altho' imperfect, are a kind of Testimony, some by Tradition, others in the Poets. *Ovid* had a Notion of a general *Deluge*, tho' he joins it with a particular Flood. The People of *America* say they had it from their Ancestors. Those of *Peru* say that all those Lands lay under Water, and that Men were drowned, except a few who got into wooden Vessels, like Ships, and

conti-

continued there till the Waters were gone. This they knew by their Dogs, which they sent forth: When the Dogs came in wet, they knew they were put to swim; but, when they returned dry, they understood the Waters were gone. *August Carat.*

From the whole we may observe that the present State of the Earth, according to the natural Course of Things, could not be effected but by an universal *Deluge*, which caused a Confusion all over the Globe. The smaller Parts might be blended together casually, but the greater ordered by Design. The Hills and Vales, the *Strata* of Stone, Coals, Metals, &c. were directed by an Almighty Hand; and tho' partly broken and dislocated by the Flood, yet are so placed for good Purposes, for the Use and Exercise of Man, suitable to his present State; all which demonstrate an admirable Contrivance. The Author of the Works is manifest; but a perfect Knowledge of Nature is no where to be found but in the Author of it. *All thy Works praise thee, O Lord.*





*A Thought concerning the Heavens,
and Multiplicity of Worlds.*

 HERE is a Consideration of the *Heavens*, which may not arrive to certain Knowledge, nor is it necessary for us to know; yet it may arise to a Probability, which by the way will move us to admire the mighty Works of God. Seeing this Earth is but a Point, or like a Grain of Sand, in Comparison of the Universe, we may reasonably suppose that there are more terrestrial *Globes*, which are replenish'd with live Inhabitants, and of several Kinds different from us: For altho' we can have no Notion of them, yet there may be many Inventions, within the Compass of infinite Power, beyond what we can imagine; and hence we may also conjecture, that the Universe was in being before this Earth was created, and will continue after this *Globe* is dissolved.

Whilst we consider the Heavens, we still find more Cause to admire; we discover more Wonders; we see the Tokens of Omnipotence, and the Evidences of infinite Wisdom, but can know nothing perfectly. To God only all his Works are known. *Canst thou, by searching, find out God? Canst thou find out the Almighty*
unto

unto Perfection? Job 11. 7. *It is as high as the Heaven, what canst thou do? Deeper than Hell, what canst thou know?* v. 8. Thou canst not measure the Height of the visible Heavens, much less the Divine Perfections. *God hath set the World in Mens Hearts, that they may consider the excellent Work; yet so that no Man can find out the Work that God maketh from the Beginning to the End,* Eccl. 3. 11.

The Earth is as it were a Footstool to the Almighty, infinitely distant from his Throne, and as mean in Comparison of it; the higher we go from this Earth, the greater is the Perfection. The learned Bishop *Hall* saith, "Some, that have curiously calculated, have found it five hundred Years Journey unto the Starry Heaven, and that is 3142 Years Journey in Circumference. If we were in that Heaven, the Earth would seem as little to us as now the least Star seems to us upon Earth; and we should then see another Face of the Heavens, as far distant as this we now behold." How vast is the Heaven of Heavens! It is in Proportion more glorious. The Imperial *Heaven* exceeds the Visible in Glory, more than that excels the *Earth*.

The outward Heaven is beautiful and wonderful beyond Description. What a World of Lights! The Creator hath set these in view, to intimate what is within. "The lowest Pavement of Heaven being so glorious, what shall we think of the better Parts unseen? And if the Sun be of such Brightness, how great

“ great is the Maker’s Glory? Yet if other
“ Stars were let down as low, those Stars
“ would be as Suns to us.” But if we imagine
in our Minds, beyond the Reach of our Eyes,
how God covers himself with Light as with
a Garment, and stretcheth out the Heavens
like a Curtain; layeth the Beams of his Cham-
bers in the Waters; maketh the Clouds his
Chariot, and walketh upon the Wings of the
Wind: *How is he clothed with Majesty and
Honour!* Psal. 104. 1, 2, 3.

We admire the Palace of a mighty Prince,
and the great Appearance of Grandeur; yet
one Prince’s Court is little in Comparison of
the whole Earth, and this but a Point in Com-
parison of the Heavens. In this Earth we see
a vast Variety of Beings, the least of which we
cannot perfectly understand, and find out the
Secret of its Nature; but the *Heavens* contain
a vast Number of Bodies, those Lights of the
Firmament, most of them much greater than
this Earth; and those which seem near to one
another, are as far distant from each other as
this Earth is from them. There are many
more than are visible to the Eye, discover’d by
the Telescope, and many more beyond its
Reach. *The Host of Heaven cannot be num-
bered.*

We reasonably suppose that there are divers
Systems of Stars, like to our Sun and his atten-
ding Planets. We cannot perceive their Mo-
tions, by reason of their Distance, altho’ they
move in vast Circles, none of them interfering
with

with one another. Yet all this is little in Comparison of the highest Heavens, which surround them all. We cannot conceive an End of Space; but still there is something beyond another, till God himself be the Boundary, and comprehend all things by his Immensity. How great is this infinite Being! There is no End of his Greatness. His Essence reacheth beyond the Heavens, being Omnipotent. *Behold, the Heaven, and Heaven of Heavens cannot contain thee,* 1 Kings 8. 27.

How manifold are his Works! In Wisdom hath he made them all, and for his Glory were they created. If any Creature should offend this infinite Power, how great is the Offence! It is an infinite Offence, which is committed against infinite Majesty, and dishonours the Lord of the Creation. How should Man be delivered, who is guilty of innumerable Sins, who disobey the Almighty Lord, and breaks the Order of his Creation? *If one Man sin against another, the Judge shall judge him; but if a Man sin against the Lord, who shall intreat for him?* 1 Sam. 2. 25. *Thou, even thou art to be feared; and who may stand in thy Sight, when thou art angry?* Psal. 76. 7.

There is no Doubt but that innumerable Angels inhabit the Heavens, and attend the Divine Majesty. Surely they must be glorious Beings who approach unto the King of Glory! If there is one Arch-angel, greater than all the rest, as great as a Creature can be; yet he is still only a Creature, and infinitely inferior to
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the Creator, mean in Comparison of God: *He chargeth his Angels with Folly.* This supposed more excellent Being once was not, was made out of nothing, has received all from God, and can merit nothing at his Hand. The greater he is made, the more he is oblig'd, and humbles himself before his Benefactor.

We cannot reasonably suppose that this Arch-angel, how much soever above the Angels, or how long soever created before them, could answer the Almighty Power, could intercede with his Maker, to acquit his Fellow-Creatures. He could not be qualified to satisfy the Law of God, to pacify his Wrath, and to reverse his Sentence. Such is the Majesty of God, the mightiest Creature would be confounded before him when he was angry, and would not presume to ask Life for one Soul that he had condemned. How should any Creature save the World? But *Jesus Christ* saveth Mankind, and he is a Saviour to all Eternity, *whose goings forth have been from Everlasting, Mic. 5. 2.*

Therefore this Son of God is not a Creature, but the only begotten of the Father; a Son of the same Nature, eternally One with him, equal in Nature as in Power, and hath all the same Attributes. He was the Creator, in one Action with the Father, and he shall judge the World, and there shall be one Judgment. The Angels worship him, and the Arch-angel is his Servant. *The Lord himself shall descend from Heaven, with the Voice of the Arch-angel,*
and

and with the Trump of God, and the Dead in Christ shall rise first; then we which are alive and remain, shall be caught up together with them in the Clouds, to meet the Lord in the Air: and so shall we ever be with the Lord, 1 Thes. 16. 17.

Astronomers have observed, that there is a Motion in the Heavens so slow, as not to proceed above $\frac{3}{4}$ of a Minute in the Space of a whole Year; namely, the Motion of the fixed Stars from West to East, which, to make one Revolution, will take above 25000 Years. Now this Motion being performed upon the Poles of the *Ecliptick*, and not upon the Poles of the World, will make great Changes in the Face of the Heavens, if the World last long enough: For all the Stars will strangely shift their Places, and others will succeed them; in-somuch that even the *Pole-Star* itself, which is the great Direction to those that see God's Wonders in the Deep, shall quit its Station a considerable Space in the Term of 12500 Years or thereabout, and in the same time will return to its former Place.

Hence arise these Enquiries, whether the World has not had a Beginning long before this Globe of ours was created, which, we are assured, has existed only 5688 Years in the Form as now it is; and whether it shall have an End before the Heavens have performed this great Revolution, and hath shewed all those *Phases*, which are the proper Result of its Construction, tho' probably this Earth may be sooner

sooner dissolved; and whether the vast Universe, in the supposed time of its Existence, and within its immense Space, hath not more inhabitable Globes, and consequently Inhabitants, than those of the Race of *Adam*.

The World shews an Almighty Power and infinite Wisdom in the Creator. If a Man hath contrived an ingenious Work, which contains several *Motions*, and exhibits a pleasant Variety of *Phases* with great Exactness, much to the Wonder of the Beholders, and no less to the Praise of him that made it; if this Artist should break in Pieces this curious Machine, before it could have time to shew the Wonders of its Contrivance, such an Action wou'd not be commendable. The Glory of any Work languisheth, if there be no Eye to behold it, or no Time to view its Excellencies. Why then may not the World in general have been existent before this particular Earth was made? And may not this terrestrial Planet too have been in another State, before it came to be incrusted with a Shell of Earth? The Existence of this Globe, I take to be no more, in comparison of the Universe, than the Birth of a Child in a great City, and its Dissolution as the Death of one Man.

For as the Birth or Death of particular Persons makes no Change in the Government of a Community; as the Ruin of one City or rising of another makes no Alteration in the general State of a Kingdom; and as the Decay of one Kingdom and Growth of another, makes no

general Change in the Whole : So the Beginning and Period of our *Terraqueous* Globe may be no more to the Universe ; nor will make no greater Figure in another Vortex, than the Appearance of a Comet, or Dissolution of a Star, as hath happen'd heretofore ; it may be like the Appearance of the new Star in *Cassiopeia*, and others of later Times ; of which the ingenious Mr. *Keil* gives an Account ; but why their Time was so short, it is hard to be accounted for ; perhaps they might be some sort of Comets which have sent forth no Flame, or that hath not been visible in this low Sphere.

This Author saith of the Star above-mentioned, "*Visa est hæc Stella*, Nov. 16, 1572, "&c. and it continued in the same Place " amongst the fix'd Stars all the Time of its " Appearance, which was about 16 Months, " and by Degrees disappear'd. Its Magnitude " exceeded *Lyra* and *Syrius*, and was almost " as bright as *Venus* (*Perigæa*) when nearest to " the Earth, and by several was seen at Noon " Day ; yet at last it vanished, and was seen " no more in the Heavens. He quotes *Montanus*, who saith, there are two Stars wanting of the second Magnitude in the Stern of the Ship, and adds, *Credibile est stellas has maculis*, &c. It is credible, that these Stars " have been darken'd with Spots, or incrusted " with gross Bodies."

The *Telescope* hath discover'd a vast Number of fix'd Stars, which are invisible to the naked Eye, and the fix Magnitudes are now improved

improved to thirteen. The *Milky Way* consists of innumerable small Stars, which appear distinct in an Optick Instrument, but, being more direct above one another, seem like a white Cloud to the naked Eye; they are doubtless of divers Magnitudes, probably some of them fixed Stars, and others Planets, yet not to be distinguished by reason of their Distance. The *Pleiades* have lost a Star, as hath been long ago observed, *Ovid. Lib. 3. Fastorum, Quæ septem dici, sex tamen esse solent*; but by the Optick Skill, they are advanced to above 70, and may have some Motion not yet discovered.

But such Discoveries are made in the lower Spheres. Four Stars are observed to attend *Jupiter*, which are called his *Satellites* or *Secondary Planets*, and perform Circulations about him in divers Periods and Distances. Five accompany *Saturn*, so small as only discoverable by the longest *Telescopes*. There is also a Ring of Light about *Saturn*, which puzzles Astronomers. "To what Uses, saith Mr. *Keil*, this
"admirable Ring serves, is unknown to the
"Inhabitants of this Earth, and perhaps never
"will be known, since in Nature we find
"nothing like it; yet the infinite Majesty and
"Power of God is to be admired, who in this
"our Age hath exhibited new Specimens of
"his Works."

This Author saith, that all the fixed Stars are Suns, and offers Arguments to prove it. If it be so, we may suppose that these Suns are

attended with Planets, like this System of ours; that the largest Stars have their Vortices, and those of less Size belong to them, altho' by reason of their Distance, some are not visible to us; and of those we see, the Motions not perceptible: But we are certified, that the Planets of this System are Earthy Bodies, and by consequence fit for Inhabitants; and as nothing is created in vain, we may suppose these Globes, as well as this of ours, are furnished with Inhabitants, and so may many others in the vast Extent of the Heavens, which now we can have no Knowledge of, but perhaps may in another State.

It is agreed, that many of the Stars have a native and inherent Light like unto the Sun, that the larger exceed it in Bigness, and that the Sun is bigger than the Earth 400 times. Hence it is reasonable to infer, that in the intermediate Spaces there must be darker Bodies, that is, Planetary Regions and living Inhabitants. Why are there so many Lights, if there be nothing to be enlightened? To what Purpose are great Fires and nothing to be warm'd? *For as a Candle is not lighted to be put under a Bushel*; so neither in an empty Room, where there is none to receive the Benefit of its Light. * To imagine, therefore, that all these glorious Luminaries were made at the same time, when this Earth became inhabited, and only for its Service, in little Uses comparatively, is just as if we should suppose a thousand great Fires kindled, only to roast a Chestnut, or that

* It is not determin'd by these Words, *He made the Stars also*, Gen. 5. that they were created within the fix Days; they rather seem to distinguish these from the Works then created.

that a stately Palace were built, and furnished with splendid Lights, that certain Spiders, in one obscure Corner, might see to spin their Webs.

The learned Bishop *Wilkins* was of Opinion, that there is a World in the Moon, and wrote a Treatise upon it, wherein he gives good Reasons to prove it, with the Opinions of some other learned Men; the same Reasons prove more Worlds: But the Moon being so much nearer to us, it is more apparent. Meteors and Vapours are there discover'd; a certain Testimony, that the Moon is of the same Nature with this Earth. Concerning the kind of Inhabitants, this is not to be determined, nor is it necessary for us to know it. "It is needless, saith he, "to search after Particulars; however, we may guess in general, that there "are Inhabitants in that Planet; for why else "did Providence furnish that Place with all "such Conveniencies of Habitation, as hath "been declared?" We may modestly suppose that the Almighty is able to create several kinds of rational Creatures.

Therefore, since one Revolution of the fix'd Stars requires so many Years to finish it; since the Earth is a Planet, and the other Planets of like Nature, are habitable as well as it is; since there are mighty Changes in some Parts of the World, without any remarkable Alteration in the rest; since the End of this sublunary World may be no more to the Whole, than the dying of one Man in a City, and since the

Earth may perish by Fire, without any Damage to the World in general: I say, since these Things, at least, are probable, it seems to me that the Construction of the Universe is design'd to continue many thousand Years; that there have been many Worlds, in the boundless Expanse, before this Earth had its Being, and many will continue after the fatal Period of this Globe.

This Opinion is not inconsistent with the Holy Scripture. The Scripture is the Rule of Faith, adapted to our proper Business, which is to look after a Future State: It is not intended for a Standard of natural Truth, and to make us Naturalists; the Holy Ghost having inspired the Writers, made them speak according to the common Opinion, and designed rather to make us good Men than Philosophers: Yet we are not forbid to enquire into Nature, and meditate upon the Works of God. We may be zealous to exalt his Name and set forth his Glory; nor is it inconsistent with Christ's Appearance here; for in case other rational Creatures might fall as *Adam* did, Christ is able to satisfy for a thousand Worlds; but this of ours is more obliged for his Appearance, *by whom the Father reconciles all Things to himself, whether they be Things in Earth or Things in Heaven*, Col. 1. 20. Ephes. 1. 10.

I shall not presume to apply these Texts in favour of the aforesaid Speculation, but only say, possibly it may be so; and if the like Case with ours has happened in the Universe, it is provi-

provided for. These Texts may be understood another Way, as Expositors have explained them, *viz.* Christ's Reconciliation primarily concerns Men, and in some respect belongs to Angels, who were to be united in one Society, which Union was prevented by Sin. The Angels could not be Friends to impure Creatures, but now are reconciled by Christ's Satisfaction, and brought into one Society under Christ the *Head*; whence the Angels rejoyce in the Glory of God and the Salvation of Mankind. There is Joy in the Presence of Angels, *over one Sinner that repenteth.* God created all Things by Jesus Christ, in a kind of a new Creation, *to the Intent that now unto Principalities and Powers in heavenly Places, might be known by the Church the manifold Wisdom of God,* Eph. 3. 10.

Besides that it is not the Business of Holy Scripture to explain the Works of Nature, it may be a Design of Providence, that they are not explained by any Revelation; and some Things are mentioned as they seem to be, *such as the Sun standing still,* Jos. 10. 12. There may be Reasons unknown to us; but this is one very good Reason, that Men should be exercis'd in innocent Employments, and diverted from sinful Practice. The Scriptures have some Obscurities, and *we must search the Scriptures* to improve in Knowledge; and there are Secrets in Nature which require searching into them. Every Age discovers more of Nature, and so it is in Divinity. The Word of God

is a plentiful Spring, and it is an Argument of its Truth, that so many pure Streams flow from it; I mean the excellent Discourses in Divinity. It seems to be the wise Order of Divine Providence, that the Book of Holiness, and the Book of Nature, should exercise Mankind to the End of the World.

I shall conclude with the lower Parts of Heaven, which Name is sometimes given to the Air, where the Creator has placed his *Thunder*, to notify his Power to Men: He is himself the First Cause, but hath established Second Causes, as Instruments of his *Operations*. The Sun's Heat is an Assistant, but does not cause Thunder, by shining upon the Clouds, altho' it may add some Strength; for there is often much Thunder in the Night, sometimes in Winter, sometimes only Lightning. Some ancient Authors have written, that Thunder hath been heard in a clear Sky, *Seneca, Nat. l. 2. c. 30.* But it is supposed, that a like Noise has proceeded from an Irruption of Mount *Ætna*, by a Concourse of dry Things beating the Air. *Jonston, Nat. p. 78.*

The particular Causes of Thunder and Lightning are, the Friction or dashing of thick Clouds, promoted by the Opposition of *Heat* and *Cold*, and by the Motion of the *Air*, operating upon sulphureous Vapours, together with watery Matter. If a Mixture be made of Sulphur, Nitre, Quicklime or Bitumen, it will kindle by pouring on any Moisture; so it is here. The Air being rarefied by the Sun's Heat,

Heat, Vapours of the Earth naturally ascend, unite and condense, and are kindled by a peculiar *Antiperistasis*, that is, an Opposition and Struggle of Heat and Cold, Moisture and Sulphur or Nitre. The Cloud is opened by the Fire; sometimes the Opening is very wide, and stands a small Time, with a fiery Edge about it; the Cloud is then dashed with great Violence, the Air assisting with its Motion, and the sulphureous Matter breaks out in various Sounds.

The Effects of Lightning are wonderful, Vessels of Water are drank up, the Cover being untouch'd, and no other Token left. Gold, Silver and Brass have been melted, and the Bags not burned, nor the Seal of Wax defaced, *Pliny, lib. 2. cap. 51.* *Lucius Scipio* had Gold in a Chest of *Ofers*, which was melted, without Damage to the Chest. *Marcia*, Queen of the *Romans*, was Thunder-struck when she was great with Child, which was killed in the Womb, and she received no Hurt. The Cause of such Effects consists in Rarity and Thickness of the Fire; the more Subtile penetrates more easily, and the thicker with more Difficulty; whence the latter doth more Harm. *These are the Arrows of God.*

Pliny saith, that Lightning will not touch the *Bay Tree*, nor the *Sea-Calf*, nor the *Eagle*. *Rhodiginus* adds, the *Fig-Tree*, and saith it is by Reason of its Bitterness, *Antiq. Lect. l. 3. c. 29.* Therefore *Tiberius Cæsar* fearing Thunder, when the Skies were troubled, wore a Crown

Crown of *Bays* upon his Head, *Suetonius*. On the contrary, Dogs, Cats and Goats are apt to be Thunder-struck. The Cause is said to be peculiar Vapours that breathe from those Creatures Bodies, and correspond with the Nature of Lightning, *Borthol*. Authors observe, that there is such a Thing as a Thunder-bolt, of a hard and well-compacted Matter; it oftentimes sinks into the Earth, but never strikes above five Feet deep, *Pliny, lib. 2. c. 55*.

In the Kingdom of *Mongal* in *Tartary*, Thunder-bolts fall mingled with Snow; they are seldom found in *Brazil*, but such Lightnings there are, that they seem lighter than the Sun. In the time of *Marcus Antoninus* the Philosopher, there being a War, the Enemy was struck with Thunder at the Prayers of the Christian Soldiers; whence the Christian Legion was called the *Thundring Legion*. The Emperor, in a Letter, speaks thus, *Presently as they lay upon their Faces, and prayed to a God I know not, a cold Shower fell upon us, but upon our Enemies Hail mingled with Thunder; so that we found immediately that the Hand of the mighty God assisted us.*

The Air agitated is the Wind, which hath several concurrent Causes. *Aristotle* saith, that the Sun is the Cause of the Wind, by drawing up the Moisture that is upon the Face of the Earth. Others think the Wind is caused by the Rarefaction of the Air in some Parts, which having thereby more Vacuity, the neighbouring Air, that is not rarefied, hastens to the
empty

empty Place. This is probably one Cause, and it is more prevalent in the hottest Countries, where there are furious Hurricanes, which proceed from opposite Winds meeting together. There is a Cause of Wind from inward Heat, which sends Vapours out of the Earth. For we see in Winter, as well as Summer, that the Earth sends forth a smoaky Exhalation; a Vapour ariseth from Lakes and standing Pools, and more from the Sea. Hence it is, that Meers and lesser Lakes are disturb'd when no Wind is abroad. See *Huntingtonshire*, p. 23.

There is a Proof in the Chymical Instrument, which serves instead of Bellows. A hollow Globe is made of Copper, filled with Water, and then shut up; a Pipe with a small Hole is placed on one Side, the Globe is set to one Fire, and the Pipe pointed to another. As the Globe grows hot, and the Water rarefies, the Air continually breathes forth and serves for Bellows, till all the Water is consumed. So the Winds are bred, when Heat burns the moist Earth; the Sun, by drying, opens the Pores, and the Air assists by its Motion. If the Wind ariseth from the Sea, the Sea being at first calm, yet making a muttering Noise, shews an Exhalation already bred in the Bowels of it, that is Matter for Wind; then the Sea swelling a little signifies, that the Exhalation seeks a Passage, and, according to the Quantity, produceth Wind; a great Quantity breaks out violently, lifts up the Waves before it, and causeth a Tempest.

A P P E N -



A P P E N D I X.

INCE the Writing of the former Observations, I have met with some other remarkable Passages, which I shall set down as they occur'd in my Reading.

There is something remarkable in the Pike and Tench, Fishes common here in *England*. The Tench hath a healing Quality in a clammy Matter about him. When the Pike receives a Wound, he cures it by rubbing against a Tench, and for that end he likes to keep Company with him ; he hath a natural Enmity with a Frog, which will oft-times dig out his Eyes. The Pike naturally lives long ; one was known to have lived 267 Years. The Emperor *Frederick* had cast it into a Lake, having hid a Brass Ring under his Skin in his Gills, which had this Inscription upon it, *I am that Fish which was put into this Lake by Frederick II. on the Fifth of October.* *Conradus Celtes* saith that Pike was taken *Anno* 1497, and the Ring found upon it. *Jonston's Account of Nature*, p. 295.

The Eel, contrary to other Fishes, does not float being dead. The Reason is given by *Aristotle*, from the small Belly it hath and little Fat ; this is confirmed by the swimming of Lampreys,

preys, Congers and Murena's, for they abound with Fat. The Carp hath a little white hard Stone in his Head; and a thick Substance like to a Heart, that is flexible while it is new, but afterwards it grows hard. *Gesner*. The Female, when the time of her bringing forth is past, by moving her Mouth rouseth the Male, who casts on his Milt, and then she bringeth forth. The Herring is said to live by Water, and being taken out of it soon dies; there is nothing found in his Belly; it hath only one hungry Gut; when they see Light they swim in Shoals, and so they are caught in the autumnal *Equinox*.

Suranam, the *Dutch* Settlement in *South-America*, before mentioned. There is a curious kind of Tortoise, having a chequer'd Shell, and the Convex composed of black and * *citrine* Pieces, in the Margin, of a wedged Figure, oppositely set, and with transverse Notches; amongst which there are also little square and *citrine* Pieces intermixed. All the rest, which are also black and *citrine*, are six times as big, adorned with parallel Notches. They are not radiated, but several of the same kind contiguous Side to Side; the Belly-piece is less Convex. At the same Place there is another sort, which hath a more deep Belly, and the Edges of the Shell turned up outward, excepting in the Fore-part, and the Back less convex; in other Respects much like the other kind. *Dr. Grew*.

* *Citrine*
or *Citron*,
that is,
Gold-Co-
lour, from
*Pome-
Citron*.

On the South of the *Æquator* great Whirlwinds are seen rising at a distance, called by the *Sailor's Dragons*, which shatter and overturn any Ship that comes in their Way. In this Air Rains are very dangerous; for if one is wet, and does not immediately shift himself, his Body is soon after covered with Botches, and his Cloaths with Worms. The Island *Anabon* is in S. Lat. $1 \frac{1}{2}$ Degree. Here is a Fowl called *Penguin*, less than those of *Penguin* Island, being no bigger than a Pigeon; another small Island hard by is so covered with them that one cannot walk any where without treading upon the Eggs. In these Islands the Womens Breasts are so long that they carry their Children on their Backs, and suckle them over their Shoulders. *Harris.*

Brazil. There is a sort of yellowish Monkey that smells like Musk. There is a kind called the *King-Monkey*, because of his Largeness, being far bigger than all other kinds; as big as a Mastiff, having a Tail five Cubits long. In the Island *Maraguan*, in the North-part of *Brazil*, there are some Urchins or Hedge-hogs almost as big as Boars. He makes his Burrow with two Entrances, to the North and South; and, according to the Season or Weather, he keeps one stopp'd up and the other open. *Johannes Lerus*, perhaps the aforesaid *Lerus*, who travelled most of any Man in *Brazil*, is quoted by *Linschotten*. He mentions a scaly Lizard there, as thick as a Man's Middle, and six Feet long. *Dr. Grew.*

Mada-

Madagascar, or *St. Laurence's Island*. There also is the *Chamæleon*, which has been mentioned above; and I shall add some Particulars. It is to be observed that his Skin is all over rough with little round Knobs, on his Head and Back greater, on his Sides and Belly less. To this Form of his Skin his Changeableness of Colours is ascribed, which seems to depend upon the Falling or Swelling of the said Knobs; whereby the Light, receiving different Reflections, produceth different Colours; and *Scaliger* hath observed, with *John Landius*, that the Colours are not changed properly, but only the several Species heightened or deepen'd by that which has touched them. *Dr. Grew*.

Salamanders are found in this Island. They are a sort of Lizard extremely cold by Nature, and will, like Ice, endure the Fire for some time; yea, they will put it out if it be little; but a great Fire will burn them, as is known by Experience. They lie in moist and shady Places, and seldom appear but before a Storm. Their Teeth and Tongues are venomous; but their Flesh may be eaten without Danger. *St. Augustin's Bay* is the noted Harbour of this Island, which is under the *Tropick of Capricorn*, S. Lat. 23. There is a Wood wherein is a Multitude of Lizards that offer Hurt to nobody; and little Monkeys and Apes, which are pleasant to see dancing and skipping about continually. *Mr. de la Val*.

There is a chequer'd-shell Tortoise, larger than that above-mentioned, and different in
several

several Particulars; being much more concave, a Foot long, eight Inches over, and almost six Inches high. The Concave is composed of forty-six Bones. To the twelve middle-most, Ribs are joined by alternate Joints; to these Under-Ribs are joined in a wonderful Manner, viz. by a branched *Suture* or Indenture. For the great Teeth of the Under-Ribs being first inserted into those of the Upper-Ribs, the Indenture is afterwards repeated by lesser Teeth out of the Sides of the great-ones. Besides the Elegancy of the Work, it follows the Rule of Nature in the Human Skull, and of Art in Building, for the greater Strength. Dr. *Grew*.

Islands of *Comorro*, $12\frac{1}{2}$ Deg. S. Lat. lie between *St. Laurence* (*Madagascar*) and the Continent of *Africa*, 70 Leagues from *Zanguebar*. They are five, all extream fertile in Oranges, Citrons, &c. One Day, says the Author, we saw a monstrous Fish rise above the Water, which had the Form and Figure of a Man, with a sort of Beard towards the Chin that seemed to be his Fins, and a long scaly Head terminating in a Point; when we offer'd to come near him he plunged his Head under Water, and so discovered part of his Back, which was scaly. Mr. *de la Val*.

Melinda, on the East-side of *Africa*, bordering upon *Zanguebar*. Here Elephants are very numerous; the *Blacks* hunt them, and eat their Flesh, but are obliged to give the Lord of the Place the Teeth, inasmuch, that there are several Parks empal'd with Elephant's Teeth a
League

League round. The greatest Quantity of Ambergrease is found on this Coast; it is a sweet-scented clammy Substance. Elephants also abound in *Monomotapa*, an inland large Country joining to *Melinda*. The Palisadoes of their Fortresses, and Pales of their Parks, are made of their Teeth; and the Flesh is the usual Diet. Here is the finest Gold of *Africa*; and they dig it with Ease out of the Earth, not above two or three Foot deep. *Tavernier*.

Macassar, otherwise called the Isle of *Celebes*, begins at S. Lat. 15. The Natives poison their Arrows, to work slow or swift, as they please. But here is the most excellent Medicine against Poison, that of the *Bezoar-stone* that is found in the Apes. In other Parts of *India* this Stone is found in the Paunch of wild Goats very good; a weaker sort is bred in Cows, and Apes of other Countries; but the best is those of *Macassar*, which is so strong that two Grains work as powerfully as six Grains of Goats *Bezoar*; a Piece as big as a Nut is valued at 100 Crowns. There is some in Western Countries; but the Oriental much preferable, and of different Form, consisting of several distinct Coats, lying one over another, like those of an Onion. *Id.*

Serong in *Indoston*. Here are made *Calicuts* called *Chites*, in great Perfection; which is owing to the Excellency of the Water. The same sort is made in other Countries; but the Colours not so lively nor lasting, wearing out with often washing; whereas those at *Serong*

are fairer the more you wash them. This ariseth from the peculiar Virtue of the Water of the River, when the Rains fall. The Workmen make such Prints upon their Cottons as the Merchants order by Patterns, and dip them often in the River, which so fixes the Colours that they will always hold. *Tavernier.*

Gate is a strait Passage in the Road to *Agra*, a Quarter of a League long between the Mountains. Not far from hence is a Magazine of Rice and Corn, kept by Serpents 13 or 14 Foot long, and of a proportionable Bigness. The City of *Barocke* is made famous for Trade by the River, which has a peculiar Quality to whiten their Cotton, and which are therefore brought from all Parts of the *Mogul's* Territories for that End. Here are Mountebanks that do strange Tricks; they will wind a red-hot Chain about their naked Bodies several times. But what is most wonderful, they will thrust a dry Stick into the Ground, and, in less than half an Hour's time, make it a Tree four or five Foot high, bearing Leaves and Flowers as in the Spring-time. An *English* Minister, seeing this Witchcraft, declared it to be unlawful to be a Spectator of such Delusions. *Tavernier, Harris, 2. 353.*

Pâlicate, a *Dutch* Factory, to which the way lies a League through the Sea, and the Water that supplies the Town is fetched out of Holes dug in the Sand, when the Sea is quite out, and it is fresh; having a short way from the Sea, yet straiter Passage to drain the Salt-ness.

ness. *Visapour* in *Dacan*. In its Territory grows the *Cardamum*, the most excellent of all Spices, peculiar to this Country, and not in great Plenty, so that it is only used at the Tables of great Princes; it is a kind of spicy Seed. There is a Creature called *Biggel*, of the Size of a Rein-Deer, having a Head like a Horse, a Mane like an Ass, with black cloven Feet, and two Horns on his Head. *Mandelslo*.

This Author being in the *Indian-Sea*, two Minutes beyond the *Equinoctial*, asked the Master of the Ship, whether, according to the vulgar Opinion, he might there discover both *Poles*? But he sufficiently convinced him, that the *North-Pole* was not to be seen till about six Degrees, and the *South-Pole* till the eighth Degree of the *Line*; and that when you come to eight or ten Degrees, the North-West Wind reigns there constantly for six Months, as the South-East does the other Months of the Year. Thereabout they took a Sea-Hog, so called, because it hath a Snout like a Pig. The *Dutch* open'd one of them, and found a young Pig in the Belly of it; I suppose one of its own Kind.

Maurice-Island. Here the *Dutch* took a Thornback, which made two good Meals for the whole Ship; and there are Tortoises so large that ten Men may sit upon one Shell. *Ambergrease* is often found floating about this Island, and is highly valued. Here is also abundance of Coral; it is a green Shrub in the Salt-Sea, but has no Leaves; it beareth white

Berries, which, by Force of the Sea and Air, turn into Stone. *Japan* is composed of many Islands, and extends from Lat. 31 to 39. The Forests produce a kind of Horse, with Horns like a Deer; and the Flesh of it is a great Dainty. *Herbert.*

Here is a certain hot Spring, which spouts forth its Waters duly twice every twenty-four Hours, and four times when the East-Wind blows; of which probably the Reason is, that the East-Wind drives the Sea oftener and stronger towards the Island. This Water comes with such Violence, that though it ariseth amidst the Stones, which are laid on the Top of the Hole, to the Height of twenty or twenty-four Foot, yet it is so hot that no boiling Water is to be compared to it, burning every thing it touches at its first coming out; but being conveyed by Pipes into the Houses, it is reduced to such a Degree of Heat, that it is convenient for bathing. These mineral Waters are Proofs that *Japan* is full of Mines of all sorts. *Mandelſto.*

Ckinchin, a Province of *Great Tartary*. There is a Mountain, wherein are Mines of *Salamandre*, whereof they make Linnen that will not burn. I have observed this before by the Name of *Amianthus*. It hath the other Name from the vulgar Error, that the *Salamander-Lizard* will live in the Fire. This Mineral spreads in Threads, which may be wrought like Flax; and what is most surprizing, is, that they whiten it in the Fire, which only
consumes

consumes the Filth, and does no Damage to the Cloth. It is said there is a Piece of this Stuff at *Rome*, sent to one of the Popes by one of the Kings of *Tartary*. *Kircher* relates it, and I thought it worthy to be related for a Confirmation. This Place is North of *China*. *Collier, Kircher.*

Maldives. There is a Tree called *Candore*, whose Wood is very soft and lighter than Cork, whereof many Pieces being joined together, as they have Occasion, and fastened to a Cable-Rope, they can raise Stones and other great Weights out of the Sea, by the great Swelling of the Wood. By this the Natives weighed up the Cannon and Anchors of a Ship that was cast away, and cleared their Harbour of Rocks that had fallen down into it. This Wood has another Property that, when one Piece is struck against another they will strike Fire, and serve instead of Tinder; which is the more strange, the Wood being so soft and porous. *Mr. de la Val.*

Philippin-Islands. The Chief is *Luconia*, and the chief City *Manilla*, 16 Deg. N. Lat. Here the two great *Acapulco*-Ships come once a Year, loaden with Plate and other rich Goods of *Mexico*. Among them are many Crocodiles, which the Natives kill in a peculiar Manner. A Man gantlets his left Arm to the Elbow, having in the same Hand a short Truncheon, piked at both Ends, with a Dagger in the other Hand; thus armed, he goes into the Water up to the Waist, and

whilst the Crocodile makes at him with open Jaws, he thrusts his left Hand down his Throat, so as to keep them from shutting, and, in the mean time, stabs him in the Throat with the Dagger till he drops down dead. *Mandelslo.*

Columna saw a Crocodile alive, and thus describes it. It was not a large one, being only four Yards and a half long, about two Yards high, short leg'd, cloven footed, yet not with two but four Hoofs, tailed like a Hog, which he also twists in the same Manner. His Head almost like an Ox, his Eyes small, his fore Teeth prodigious great, being some of them half a Foot round about, almost a Foot long, as appears in the Skeleton about that Size; which I myself have seen in *Gresham-College*. At *Panama* in *New-Spain*, there are Crocodiles of one hundred Foot long, as is affirmed by *John de Lopez*. They are reckoned good Meat by the Natives of *Brazil*, where they take them by a long Rope fastened to a Tree by the Waterside, and a strong Hook baited with a Weather. *Dr. Grew.*

Golconda-City, N. Lat. 17, 10. There are large Bats, bigger than our Hens, which have been mention'd in other Places; but I shall observe here from *Dr. Grew*, that these Creatures stand in the Rear of Beasts and in the Front of Birds; and from *Mr. Boyle's Book of Final Causes*, who saith, p. 67. "It seems absolutely necessary that flying Creatures should be furnished with Feathers for that End. But the wise Creator has shewed that he is
" not

“ not confined to make use of them for that
 “ Purpose, since there are Flying-Fish and
 “ Flying-Squirrels; and tho’ the Flight of
 “ these is not long, yet there is another Kind
 “ of Animals, without Feathers, that can fly
 “ long enough, namely the *Bat*. So that the
 “ Creator, in divers Manners, shews a Design
 “ in making, and Wisdom in Contrivance.

Martaban, N. Lat. 16. Lon. 96. on the Bay
 of *Bengal*. There is a Gum called *Lac*,
 which has been mentioned before; and here
 is a further Account. It proceeds from a Tree
 called *Ber Indica*. It is generally agreed that
 this Gum is made by winged Ants out of the
 Tree itself. It is most likely that these Ants
 finding the Sap or Gum of this Tree agreeable
 for their Food or other Use, and nibbling at
 the Bark to come at it, it thereupon issues
 out at the Wounds they make. The *Indians*
 make several Sorts of *artificial Lac*, by mix-
 ing this Gum with other Materials of all Co-
 lours; with which all the turned Works of
India, *China* and *Japan*, are burnished. It is
 used also to make Sealing-wax. Dr. Grew.

Bengal. Here the *Camel* seems to excel
 others, and deserves the Title of the greatest
 Slave of any Beast in the World; for he is
 fond of his Burden; he cries and moans at
 Night in a doleful manner, when his Load is
 taken off, and seems to be as much pleased in
 the Morning, when ’tis laid on again. There
 is hardly any thing like him throughout all
 Nature, unless it be a Man of lewd vicious

Habits, that fits with Ease under the heaviest Oppressions, and counts an Attempt to free him an Injury: But this Creature improves the Example that other Camels set to Mankind, that they should patiently and chearfully undergo the Service which the Creator hath appointed to them.

Achen, N. Lat. $5 \frac{1}{2}$ Deg. situated on the North-point of *Summatra*. Here the King keeps 900 Elephants, which he corrects as Men, and makes them his Executioners of his Punishments, which they perform as directed. They will beat a Man less or more, or kill him outright as commanded. They are bred to salute the King, by bending the Knee when they pass by his Apartments, and to tread Fire under their Feet. The King, going to besiege *Dely*, order'd one hundred Elephants to be embark'd for that Siege. When they were brought to the Shore, not one of them would enter a Ship, which some of them took for a bad Omen; but the King, having chided them with great Passion, and upbraided them with the Favours he had bestowed upon them, caused one of the principal Elephants to be cut in two before their Eyes, threatening the rest with the same Usage, if they did not immediately embark. This done, they embark'd very peaceably, and were extreme tractable during the whole Voyage. *Harris*.

At *Dely* there is a Fountain of Oil, which is said to be unextinguishable when it is set on Fire. With it the King of *Achen* burnt two
Portuguese

Portuguese Galleons. Here are many sorts of Fruits, which have their proper Seasons throughout the Year; so that there is not a Month without some ripe Fruit. Here Crocodiles are numerous, which are one of the greatest Wonders, in that, from so small a Beginning as an Egg not much bigger than a Turkey's, it increaseth to ten or fifteen Yards, and some to much greater Length. The Number 60 is notable in the Female; 60 Days pass before she lays Eggs, and she lays usually 60 Eggs; she conceals them 60 Days, and sits on them 60 Days before hatching. She has 60 Teeth and 60 Joints; and they usually live 60 Years. *Sir Thomas Herbert.*

There is a great Wonder of Nature in the Production of Eggs, and the Contrivance of of their Sizes, which manifests a Design of the Creator. The Crocodile hath a Number proportionable. In Birds it is observable, that the Figure of the Egg usually answers to that of the Body or Trunk of the Bird to which it belongs; as the Fruit is longer or broader, answerable to a tall or spreading Tree; and as it is a Transcript from the Original, so itself is an Original for the next Copy: So those Birds that have a Rump and Hinder-parts more oval and spreading, as the Duck, or more conical or sharp, as the Dunghil-Hen, breed and are bred of Eggs so shaped, *viz.* That so there may be sufficient, yet no superfluous Room for the Chick.

There

There is a Wonder in the different sorts of Eggs, and every Bird of a Kind bringing forth always the same Form. Some are almost as round as a Ball; others, as the most, are more oblong: Of these some few are perfectly oval, that is, having both Ends defined with two equal Ellipses; but most are conical, or with one End sharper than the other: Of these again, most have their smaller End but blunt, some few, very sharp. And almost all, both blunt and sharp, are convexly conical, that is, they are all along convex between both Ends; whereas some few are plano-conical, whose Superficies is in Part level between both Ends; and every Bird brings exactly the same Form, when there is no Difference, or very inconsiderable in the Size.

But the greatest Wonder of all is, in the Colours of the Eggs and Feathers, which have no Relation to the Size and Form of the Bird, nor any Dependence on its Body; but this must only proceed from the Will and Pleasure of the Creator, who would manifest his Handiwork in such a wonderful Variety of Operations, without any other Reason for so doing. And though the Variety of Colours in Eggs is limited to the several Species, yet there is another Variety in the Feathers, which have not always the same Colours in the same Kind; as in Dunghil-Cocks and Hens, Geese, Turkeys, Pigeons, Parrots and some others. The same Observation is to be made in the various Spots
of

of Dogs and other Animals, for which there appears not any natural Cause.

What is the Reason that the Eggs of a Crow are of a blue Colour, besprinkled all over with dark brown Spots, and obtusely conical? And what is the Reason that the Eggs of a Rook are painted all over with green, and dark brown Spots, and somewhat less than a Crow's? The Egg of a Lapwing is plano-conical and sharp, of a reddish Colour, stain'd with large black Spots, a little bigger than that of a Rook. And the Egg of a Redshank is of a kind of Straw-colour, tinged with sad bay Spots, with one End very sharp, in Bigness like that of a Rook, but a little shorter. Perhaps there is the same Number of Spots on every Egg of the same kind. These Colours have no more Relation to the Body of the Bird, than any Paint upon Paper hath; and yet, if Paper should receive Colours, without a Hand to paint them, or Materials for Painting, it would be miraculous. It is more wonderful that Eggs should be painted within the Body of Animals.

There is another Wonder in the uncommon, tho' not unnatural Production of Eggs, that is of one Egg within another, as has been found in Swans, Hens and Turkies. There is a Swan's Egg with another within it in *Gresham-College*; the utmost is a little bigger than ordinary; the inner is of the same Figure, bigger than the largest Hen's Egg; the Shell of the same Hardness and Thickness; this latter was perfectly

perfectly formed, but not being big enough to provoke the *Uterus* to Exclusion, new Matter has gather'd round about it; and was the more easily supplied, because so little was spent upon the former. And it may be noted, that Nature is so intent upon finishing her Work, that she may be observed much oftener to overdo than underdo; you shall find twenty Eggs with two Yolks, or hear of twenty Animals with two Heads, for one that hath none. Dr. *Grew*.

The Works of Nature should fill us with Admiration and Praise of the God of Nature, who hath made all things in due Proportion, in Number, Weight and Measure. O Lord, *how manifold are thy Works! In Wisdom hast thou made them all; the Earth is full of thy Riches. Many are thy wonderful Works, which thou hast done, and thy Thoughts to us-ward. They cannot be reckoned up in order unto thee; if I would declare and speak of them, they are more than can be numbered, Psal. 104, 24. 40, 5.*



General



*General Reflections upon the Wonders
of Nature.*

UPON the first View of Nature we discover a Supream Power, and find no Reason to imagine that Nature is an Agent of itself. We discover an intelligent Mind, which hath created all Things, because they are determined to proper Uses, and nicely fitted to certain Ends. We discover an infinite Mind, which hath made such a Variety of Creatures, to us innumerable and surpassing our Knowledge; yet to him all are perfectly known. He sees all Things at one View, and to him our very Hairs are numbered. *Known unto God are all his Works from the Beginning of the World, Acts 15. 18.*

But if our Knowledge is small at first, and we are not immediately informed, or not plainly taught all necessary Knowledge; it is because God designed an Employment for Mankind, and that they should study for excellent Things. God hath so ordered the State of Man, that he should shew a Respect to his Maker, and take some Pains for his own *Good*, as it is most reasonable he should; that he be thankful for his Being, and study the Honour of his Creator, in Hopes of further Favours
from

from him, who is able to confer more Benefits. *This is called Religion and the Service of God.*

The Works of God are a great Help to Religion, and designed to be an Initiation to his Service; by these Streams we come to the Fountain-Head, and are directed to the height of Knowledge. Every thing is not made so plain that there needs no Thought about it; but it is very reasonable that we take some Trouble to gain Knowledge in any kind, and to use the Means set before us. *A wise Man will hear, and will increase Learning, and a Man of Understanding will attain unto wise Counsels, Prov. 1. 5.*

The Foundation of Religion is laid in Nature, from whence there is a continual Progress to the height of Faith. Faith is indeed a Gift of God; but God makes use of Means as in other Cases, and will have Men to use Means; otherwise he doth not give his Assistance, except upon some extraordinary Occasions. Nature first shews the Way, and God directs our Paths. He first useth ordinary Means, which are found in his visible Works; to these he adds his revealed Word, and to that extraordinary Miracles, but chiefly his own peculiar Gift. For, saith our Saviour, *None can come to me, except the Father draw him, Joh. 6. 44.*

Those Means are proposed to Man's Reason, which must bear a Part in his Concerns; and those Means are so ordered as to be consistent with Man's Freedom, that his Will also may
act

act its Part. God requires the Service of the Will, without which all Service is worth nothing, no more than the Service of brute Creatures. Every Part is necessary to the whole Frame. There is a gradual Advance from the rough Parts of Nature to the Perfection of Religion; and Reason proceeds with a Divine Influence *till we are a spiritual Building, compleat in all the Will of God.*

All Nature is a Miracle, and every Part is wonderful; the smallest Part would be a Miracle, if it were produced out of Course; but the Whole is less regarded, because it is daily seen. It is a great Weakness of Men not to consider the mighty Works that are done in all the World; miraculous Works are not greater than the Works of *Creation*; but, as they are a Deviation from Nature, they are a proper Confirmation of Religion. Miracles attest the Truth of *Jesus Christ*, that He is One with the God of Nature, because he could change the Course of Nature, command it by his own Word, and by a *Power* within Himself, *as they were at first created.*

The Creation of Food, giving Life to the Dead, commanding the Winds, curing Diseases by a Word, are of the same kind with the first Creation, and demonstrate the same Power in the Son of God, (who indeed is the very *Word* of God) who made all Things at the Beginning. Some miraculous Works were done by his Servants; but they acted by his Commission, and a Power derived from him. They spake

spake not for themselves, but join in his own Testimony, That He is singularly, really and properly, *The Son of God*.

For God sent his *own* Son upon the great Occasion of Mankind, who must have perished by his Justice, to save them in a just Way, and to teach them according to *Reason*; to shew them the Evil of Sin, and a proper Religion for a sinful State; to reverse the Sentence of Condemnation, which had been passed upon all Men, and to give them an eternal Happiness: For the Judge of all the World must do Right. God hath a most strict Regard to his Justice, yet *so loved the World that He gave his only begotten Son, that whosoever believeth in Him should not perish, but have everlasting Life*, Joh. 3. 16.

The Creator had sufficiently manifested himself by his Works, which could not have been without an Almighty Power, and the Contrivance of Infinite Wisdom; nor continue without his Providence. He hath given to Man *Reason*, by which he can draw Conclusions, and see the Hand of God in every Creature. It was in Pity to the fallen State of Mankind that God manifested himself by extraordinary Means; and when Men had further corrupted themselves, tho' they were unworthy of his Regard, yet he was pleased still to shew himself in such a Manner as not to destroy Man's Liberty; but that he might render a Free-will Offering, and shew a dutiful Regard to his Maker, that he might bestow upon him more
excellent

excellent Gifts. God, who at fundry times, and in divers mannners, spake in time past unto the Fathers by the Prophets, *hath in these last Days spoken unto us by his Son*, Heb. 1. 1.

But still the Consideration of God's Works is necessary to form a Belief of a Divine Providence, and to lead Men to a Belief of his Revelations. They teach him to believe in that God, without whom the World could not subsist; and assist him to believe a future State, without which Man's Happiness could not be compleated. The Earth is full of the Goodness of the Lord; yet this being insufficient to Happiness, we are assisted by it to believe, in Conjunction with Revelation, *That there is a better Life in Reserve*. The same Divine Goodness which provides for the Body, intimates a Provision for the Soul, agreeable to their respective Natures. We can understand, by our Reason, that the Things, proposed by Revelation, are fit for the Soul, as the others are for the Body; and that, according to our Necessities, God would provide for his indigent Creatures. *God will supply all your Need, according to his Riches in Glory by Christ Jesus*, Phil. 4. 19.

Mankind, being in a State of Weakness, hath need of Divine Assistance; and, whilst we shew a Respect to God, he will not let us want what is necessary. It is upon Consideration of his Works, and some Endeavours to know him, that he assists us to more Knowledge; provided also we ask his Favour, which

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is very reasonable we should do. Our careful Endeavours are acceptable, and draw down from Heaven continual Supplies. God will cause the Works of Nature, and the Principles of Natural Religion, to operate upon the Mind, and lead us unto *Jesus Christ*; by whom God, who was before offended, will be reconciled to us as a Father; and then, if an ordinary Father gives Bread to his Children, *how much rather will your Heavenly Father give the Holy Spirit to them that ask him*, Luke 11. 13.

* *Hosea*

11. 4.

Thus God draws Man to himself * *with the Cords of a Man*, in a reasonable Way; he would exercise his Goodness, he would be gracious to Man, but it must be done according to Reason: All the way he takes Care to preserve Man's Liberty, that he may be still a Free-Agent, as he was at first created. Nature shews an Almighty Power, and suggests in our Thoughts, that, in case we have offended such a Power, we should seek Means of Reconciliation. We could never avoid his Judgment; but it seems agreeable to Reason, and suitable to our Necessity, that some way be found to appease the Deity; which Consideration put the *Gentiles* upon offering Sacrifices, which, however, could not be sufficient: For it is not possible that the Blood of Bulls and Goats should take away Sins; *but by one Offering Christ hath perfected for ever them that are sanctified*, Heb. 10. 4, 14.

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We may expect to find in the Deity both Goodness and Mercy, but withal Justice and Holiness; and these Attributes must consist together in doing Good to Mankind. Therefore, since there is a fair Evidence of Revelation, which more clearly shews our Wants, and how they are to be supplied; since there is no other Means provided but what we find in the Holy Scriptures, none other Name under Heaven given among Men, but only the Name of *Jesus Christ*; it seems to be evident that the Christian Religion is the only Means we have to depend upon for Life and Happiness in another State. And as Life and Immortality is brought to Light by the Gospel; so, by the Gospel only, it appears, *that God hath not appointed us to Wrath, but to obtain Salvation by our Lord Jesus Christ*, 1 Thes. 5. 9.

But still a Care is to be taken on our Part, and pious Endeavours to be used, that we may be the proper Persons on whom the Benefits of the Gospel may be conferred, that we may *be Children of God, and Heirs of the Kingdom, which he hath promised to them that love him*, James 2. 5. We see in this Dispensation, and all along throughout the Holy Scriptures, that God's Method of dealing with Men, and all the Means he hath used to instruct them, are so ordered by his Wisdom as to require a Work of Man; and also to preserve his Liberty, that he may be served with a Will. And therefore we should not expect any more Revelations, nor any Force to determine our Choice. *If*

any Man will do his Will, he shall know of the Doctrine, Joh. 7. 17.

The Gospel brings along with it all necessary Assistance, both for Knowledge and Practice. It enlightens the Understanding, and kindly inclines the Will; but doth not force it to Obedience. The Gospel is the Power of God to Salvation to every one that believeth, *Rom. 1. 16.* There is a secret Power and Efficacy of the Spirit going along with the Word into the Mind and Will, whereby it more readily takes Effect. *Paul planteth and Apollos watereth, * Jam. 1. 18. † 1 Pet. 1. 23. but God giveth the Increase, 1 Cor. 3. 6. * Of his own Will he begat us with the Word of Truth †; and we are born again by the Word of God, and we must act as living Men, because God doth enable us; work out your own Salvation with Fear and Trembling: For it is God that worketh in you both to will and to do of his own good Pleasure, Phil. 2. 12.*

If Men will give Attention, and apply their Minds, as reasonable Men should do, the Gospel is of such a Nature, as makes it very apt to attract and draw them by Persuasion, both to the Belief of it, and Obedience to it; which are the Conditions to be performed, according to the Mitigation of the Gospel-Covenant, that we may inherit the Promises, and obtain the Benefits of Christ's Redemption. If Men have a Sense of their Sins, and hear of a mighty Saviour, the Gospel makes Way into their Minds; they are glad of such an Atonement, which seems to be suitable to their State, and
delivers

delivers them from imminent Danger, the Danger of eternal Destruction. *This is a faithful Saying, and worthy of all Acceptation, that Christ Jesus came into the World to save Sinners,* 1 Tim. 1. 15.

To persuade our selves to do our Part, as with good Reason we ought, we should frequently consider outward Objects, which are daily before our Eyes. We are surrounded with Reasons to believe in God, and to be afraid of his Judgments. All the World declares a mighty Power. The Fitness of all Things to suitable Ends shews they are done by a Will, and not by blind Chance. The vast Variety of Creatures demonstrate both Power and Wisdom in forming them. It is a wonderful Contrivance, that every Species of Brutes, being so vastly numerous, have the same Ends, and the same Actions, in all Parts of the World. The Difference of Actions, in the Species of Mankind, is as wonderful, and shews a Design of the Author, that Man is to govern himself, as he hath Reason given him for that End. *The Wise shall inherit Glory,* Prov. 3. 35.

The Actions of Man may be as different as there are Differences of Capacity, which however should be govern'd by *Reason*, and improved by a Man's own Carefulness, that he may get *Wisdom*, and glorify his *Maker*; whilst other Creatures, having neither Will nor Reason, glorify God according to their Capacities, and teach Man to glorify Him, according to his greater Ability. God justly expects from Man's

Capacity, that he know him by his Works, which are sufficient for the Knowledge of his Being, and to lay the Foundation of his Service, according to Natural Religion. Reason suggests this to us, when we consider the Work of his Hands, and the Wonders he hath done in all the Earth. *His Name is so high, and that his wondrous Works declare,* Psal. 75. 2.

It is plain there is a God that preserves all Nature. Nature could no more preserve than it could make it self. Irrational Creatures have not a Power to keep themselves in their Course. Man hath a Power of *Reason*, by which he can govern himself in part; but he plainly depends upon the Almighty, *in whom we live, and move and have our Being*. Now whilst we behold the Order and Beauty of all Nature, we find in our selves much Disorder and Deformity, a great Deviation from *Reason*, and many irregular Motions, for which we know not how we may be pardoned, but by the Mediation of the Son of God. Death shews our Sinfulness, and God's Wrath against Sin. What Prospect is there in Death? there is a living Soul which cannot be acquitted from Sin, in the Judgment of infinite Holiness; *but being justified by Faith, we have Peace with God through our Lord Jesus Christ,* Rom. 5. 1.

Thus Nature teacheth Natural Religion, and makes Way for a further Belief. What God hath been pleased to do more for us, we are to take it as a great Favour; He hath assisted Natural Religion by Revelation; He hath corrected

ted the Errors of Mankind ; He hath turned our Wandrings from him, brought us home to the Shepherd of our Souls, and supplies all our Wants by his *Gospel*. These Favours we are to lay hold on, as the Effects of abundant *Mercy*, for which we should glorify God in this State of Tryal, and comfort our Souls with the Hope of eternal Happiness, giving Thanks unto the Father, who hath made us meet to be Partakers of the Inheritance of the Saints in Light ; *who hath delivered us from the Power of Darkness, and hath translated us into the Kingdom of his dear Son*, Col. 1. 12, 13.

Therefore it must needs be very wrong, that Men are careless towards their Maker, and will not allow him a reasonable Service ; or that they should form a Religion to themselves, and prescribe to the Almighty how he should deal with his Creatures, when he hath so manifestly set his Laws before us. How dare Men presume to change the Order of God's Creation, or abuse the least Part of his Work ? None can tell how great Offences are that are committed against an Almighty Power, who will measure Sins by his own Greatness, and not as if he were like unto us : It is exceeding sinful to abuse the Goodness of God, and look upon his Mercy as an Encouragement to sin, and to allow of wicked Extravagancies. This is to think God to be such a one as our selves, and to dishonour infinite Majesty. God's Mercy is very great, without allowing Men to do what they please, and taking vile Sins into the Ac-

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Therefore it muſt needs be very wrong, that Men are careleſs towards their Maker, and will not allow him a reaſonable Service; or that they ſhould form a Religion to themſelves, and preſcribe to the Almighty how he ſhould deal with his Creatures, when he hath ſo manifeſtly ſet his Laws before us. How dare Men preſume to change the Order of God's Creation, or abuſe the leaſt Part of his Work? None can tell how great Offences are that are committed againſt an Almighty Power, who will meaſure Sins by his own Greatneſs, and not as if he were like unto us: It is exceeding ſinful to abuſe the Goodneſs of God, and look upon his Mercy as an Encouragement to ſin, and to allow of wicked Extravagancies. This is to think God to be ſuch a one as our ſelves, and to diſhonour infinite Majeſty. God's Mercy is very great, without allowing Men to do what they pleaſe, and taking vile Sins into the Ac-

count. His Mercy is great enough, when shewed to them that fear him, and not to those, who, as much as in them lies, degrade him.

Men delude themselves on both hands. Those that believe not Revelation, and depend upon God's Mercy, abuse the Divine Justice; and they that profess to believe the Gospel, and think to be allowed in a sinful Course, abuse the Divine Mercy. It is a sad Prospect, that Men seek to excuse their Faults one way or another, and lay hold on the least Appearance of Excuse. There is a Contempt of Religion, as if Men acted without Reason, and knew no more than Brute Creatures. Many little regard the Publick Worship, which is most honourable to God. Some easily persuade themselves that the Sabbath ceased with the Jewish State; and that is in effect to say, That God acts contrary to Reason, and denies his own *Prerogative*.

For there is now more Reason to keep the Sabbath-day, than there was in the Jewish Dispensation: It was appointed to commemorate the Creation being finished, and to acknowledge the Creator's Goodness, in giving us so good a Being. The same Reason still continues, and a greater is added to it. If there had been no Order for it, yet one would think Man's own Reason wou'd tell him, that it were just to set apart one Day in seven for God's peculiar Service; but we have not only a Reason from our Creation, but also from a more valuable Blessing, that is, our Redemption. To
this

this the Lord's Day is dedicated, to commemorate our Deliverance from eternal Death, and to worship the Great God, who hath the sovereign Power over us.

Surely we should not despise Religion, but embrace all Opportunities, and lay hold upon all proper Means to gain the Favour of the Almighty ; surely we should fear Him who is able to destroy both Body and Soul in Hell. We were liable to eternal Death, and should rejoyce in the Sun of Righteousness, *who hath risen with Healing in his Wings.* Sin layeth our Bodies in the Dust, and we should be grateful to the Son of God, *who shall change our vile Body, that it may be fashioned like unto his glorious Body, according to the mighty Working, whereby he is able to subdue all Things to himself.* Through him we have an Access by one Spirit unto the Father, to whom be Glory through Jesus Christ, Amen.

We should therefore sometimes employ our Thoughts upon the Works of God, in order to perswade our selves to serve him better : For, indeed, it is a full Persuasion that influenceth the Mind, and that which generally is wanting to render Men more religious. The Apostle speaks of the *Gentiles*, and chargeth them with a great Fault, because they did not consider the Works of God, and by them attain to a better Knowledge, which would have led to further Improvements. It is an easy Argument, knowable by the Light of Nature, and plain to common Reason, if Men be not grossly careless.

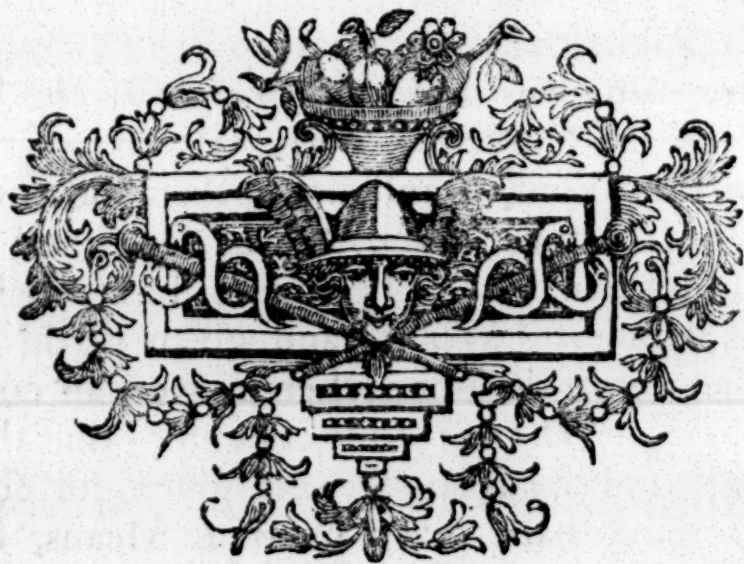
Christians

Christians are much more blameable, who have had better Means of Instruction, if they consider not the Works of God, which are daily before their Eyes, or do not make a proper Use of so clear an Argument ; it is what God expects from Men, to make a good Use of their *Reason* ; the Neglect of which has been the Cause of the *Gentiles* Ignorance, and still displeaseth the *Giver* of all good Gifts, so that they receive no further Assistance from him ; but if they will be careless, they shall be ignorant ; for the invisible Things of Him from the Creation of the World are clearly seen, being understood by the Things that are made, even his eternal Power and Godhead ; *so that they are without Excuse*, Rom. 1. 20.

We ought therefore to study the Book of Nature, which is more worth than all the Volumes in the Universe. Other Books are useful in their kind, to instruct in Arts and Sciences : But Nature is the Art of God, and the World his Science. The Creator has set before us his wonderful Works, and given us the noble Faculty of Reason, whereby we can consider them. We can readily conclude, that these Works, and our Reason, were given for some End. God hath given us these Means, that we may know himself. *He hath shewed thee, O Man, what is good*, Micah. 6. 8.

The Book of Nature is an immense Treasure, entertains with inexhaustible Variety, and profits with most excellent Instruction ; it lies open to all Men, and is most easy to be understood.

derstood. The Book of God's Works are an Introduction to the Book of his Word. As Men value one Benefit, so they will be favour'd with another; they will proceed from *Reason* to God's *Works*, from his *Works* to his *Word*, from his *Word* to his *Grace*, from *Grace* to *Heaven*. For we all with open Face, beholding as in a *Glass* the *Glory* of the *Lord*, are changed into the same Image, from *Glory* to *Glory*, even as by the *Spirit* of the *Lord*, 2 Cor. 3. 18.





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